ENTIDADE
REGULADORA DOS
SERVIÇOS ENERGÉTICOS

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TABLE OF CONTENTS

1 INTRODUCTORY REMARKS 1
ACRONYMS 5
2 SUMMARY/LAST YEAR'S MAIN EVENTS 7
2.1 ERSE organisational structure 7
2.1.1 Corporate bodies 7
2.1.1.1 Board of Directors 7
2.1.1.2 Advisory Board and Tariff Board 7
2.1.2 Main statutory objectives 8
2.1.3 Powers 9
2.1.3.1 Regulations 9
2.1.3.2 Tariffs and prices 10
2.1.3.3 Public service concessions and licences 10
2.1.3.4 Inspection and sanctions 10
2.1.3.5 Investigations and audits 11
2.1.3.6 Settlement of disputes and voluntary arbitration 11
2.1.4 Independence and accountability 11
2.1.4.1 Independence 11
2.1.4.2 Accountability 13
2.2 Key developments in the electricity sector and the natural gas sector 14
2.2.1 Wholesale market 14
2.2.1.1 Electricity sector 14
2.2.1.2 Natural gas sector 16
2.2.2 Retail market 16
2.2.2.1 Electricity sector 16
2.2.2.2 Natural gas sector 19
2.2.3 Infrastructures 19
2.2.3.1 Electricity sector 19
2.2.3.2 Natural gas sector 21
2.2.4 Regulation/Unbundling 22
2.2.4.1 Electricity sector 22
2.2.4.2 Natural gas sector 22
2.2.5 Security of supply 23
2.2.5.1 Electricity sector 23
2.2.5.2 Natural gas sector 24
2.2.6 Main legislative alterations 25
2.2.6.1 National legal framework 25
2.2.6.2 3rd package of community directives 26
2.3 Main matters dealt with by ERSE 27
2.3.1 Development of the electricity market 27
2.3.2 Development of the natural gas market 32
2.3.3 The environment and energy efficiency 34
2.3.4 Consumer protection 35
3 REGULATION AND PERFORMANCE IN THE ELECTRICITY MARKET 37

3.1 Regulation matters 37
3.1.1 General 37
3.1.2 Congestion management mechanisms for allocating available capacity at the interconnections 41
3.1.2.1 Electricity grid access tariffs 45
3.1.2.2 Continuity of supply 56
3.1.2.3 Connection to grids 61
3.1.2.4 Balancing 63
3.1.3 Separation of system operators 65
3.1.3.1 Transmission system operator 65
3.1.3.2 Autonomous Regions of the Azores and Madeira 70
3.2 Competition 71
3.2.1 Characterisation of the wholesale natural gas market 71
3.2.2 Characterisation of the retail market 79
3.2.3 Measures for promoting competition 95
3.2.3.1 Definition of the concept of dominant operator 95
3.2.3.2 Release of generation capacity 97
3.2.3.3 Concentration operations and relations with the competition authority 98
4 REGULATION AND PERFORMANCE OF THE NATURAL GAS MARKET 101
4.1 Regulation matters 101
4.1.1 General 101
4.1.2 Mechanisms for managing congestions and allocating available capacity in the infrastructures 102
4.1.2.1 Capacity allocation in the national natural gas system infrastructures 102
4.1.2.2 Congestion management mechanism 103
4.1.3 Regulation of the public natural gas system operators 103
4.1.3.1 TARIFFS FOR ACCESS TO NATURAL GAS INFRASTRUCTURES 103
4.1.3.2 QUALITY OF SERVICE 108
4.1.3.3 Balancing 108
4.1.3.4 Access to storage, linepack and other system services 109
4.1.4 Separation of infrastructure operators 110
4.1.4.1 Activity-based analysis 111
4.2 Competition 118
4.2.1 Characterisation of the wholesale natural gas market 118
4.2.2 Characterisation of the retail natural gas market 118
4.2.3 Measures for promoting competition 120
5 SECURITY OF SUPPLY 121
5.1 Electricity 121
5.1.1 Brief characterisation of 2007 121
5.1.2 Systems planning and investment in generation 125
5.2 Gas 127
5.2.1 Brief characterisation of 2007 127
5.2.2 Security of supply in the national natural gas system 128
5.2.2.1 Security reserves 128
5.2.2.2 Underground storage of natural gas 128

5.2.2.3 LNG Terminal 129
5.2.2.4 Import and diversification of supply sources 129
5.2.2.5 Long-term supply contracts 130
5.2.2.6 Definition and implementation of emergency measures 132
6 PUBLIC SERVICE 133
6.1 Public service obligations 133
6.1.1 Electricity Sector 134
6.1.2 Natural Gas Sector 135
6.2 General Terms and Conditions of Supply Contracts 136
6.2.1 Electricity Sector 136
6.2.2 Natural Gas Sector 136
6.3 Legislative provisions regarding end user tariffs 137

FIGURE INDEX

Figure 3-1 - Total number of customers in the liberalised market in 2007 40
Figure 3-2 - Consumption in the liberalised market in 2007 (Annualised monthly consumption) 41
Figure 3-3 - Tariff additivity used for calculating the access tariff 49
Figure 3-4 - Average prices paid by Dc, Ib and Ig-type customers for grid access, January to August 2007 52
Figure 3-5 - Structure of the average prices paid by Dc, Ib and Ig-type customers for grid access, January to August 2007 53
Figure 3-6 - Breakdown of the average price paid by Dc, Ib and Ig-type customers for grid access, January to August 2007 54
Figure 3-7 - Continuity of supply incentive mechanism 57
Figure 3-8 - Development in imbalances (2007) 64
Figure 3-9 - Cost and price of electricity in Portugal and price in Spain – 2007 73
Figure 3-10 - Development in consumption referred to emission and the monthly peak in 2007, mainland Portugal 75
Figure 3-11 - National consumption and contribution to satisfying demand, 2007 76
Figure 3-12 - Concentration indicators in the relative contribution to satisfying national demand in mainland Portugal 78
Figure 3-13 - Tariff additivity method used for calculating the End User tariffs 81
Figure 3-14 - Average End User Tariff prices for Dc, Ib and Ig-type consumers between January and August 2007 83
Figure 3-15 - Breakdown of average End User Tariff prices for Dc, Ib and Ig-type consumers between January and August 2007 84
Figure 3-16 - Development in consumption in the RM and LM and relative importance of the LM, mainland Portugal 87
Figure 3-17 - Distribution of clients in the LM by segment 88
Figure 3-18 - Distribution of consumption in the LM by segment 89
Figure 3-19 - Number of customers in the LM by supplier 90
Figure 3-20 - Consumption in the LM by supplier 91
Figure 4-1 - Shareholder structure of distribution system operators 114

TABLE INDEX

Table 2-1 - Nominal change in end user sales tariffs 2007/2006 18
Table 2-2 - Changes in Grid Access Tariffs in mainland Portugal 2007/2006 20
Table 2-3 - Monthly development in situations of congestion in the Portugal/Spain interconnection in 2nd half of 2007 21
Table 2-4 - Change in access tariffs 2006-2007/2007-2008 21
Table 2-5 - Change in tariffs for end users from September 2007 onwards, mainland Portugal 29
Table 2-6 - Change in grid access tariffs as of September 2007, mainland Portugal 29
Table 3-1 - Discrimination of costs included in the grid access tariffs, January to August 2007 50
Table 3-2 - Prices for grid use by HV customers, January to August 2007 51
Table 3-3 - Prices for grid use by SpLV customers, January to August 2007 51
Table 3-4 - Prices for grid use in two-rate time-of-day by StLV customers < 20.7kVA and > 2.3kVA, January to August 2007 51
Table 3-5 - Characterisation of Dc, Ib and Ig-type consumers in 2007 52
Table 3-6 - Average prices of Grid Access tariffs, January to August 2007 55
Table 3-7 - Change in grid access tariffs as of September 2007, mainland Portugal 55
Table 3-8 - Continuity of supply indicators for mainland Portugal, 2007 58
Table 3-9 - Continuity of supply indicators of islands in the Autonomous Region of the Azores by transmission and distribution network, 2007 59
Table 3-10 - Continuity of supply indicators for islands in the Autonomous Region of the Azores with distribution networks only, 2007 60
Table 3-11 - Continuity of supply indicators for the islands in the Autonomous Region of Madeira, 2007 61
Table 3-12 - Types of imbalance, by function 63
Table 3-13 - Total annual imbalances and unit values (2007) 65
Table 3-14 - Relative contribution to satisfying national demand, mainland Portugal 76
Table 3-15 - Characterisation of demand by type of supply, 2007 79
Table 3-16 - Breakdown of non-household VHV, HV, MV and LV consumption and customers by consumption category 80
Table 3-17 - Breakdown of StLV household consumption and customers, by consumption category 80
Table 3-18 - Average End User Tariff prices between January and August 2007 84
Table 3-19 - Change in tariffs for end users from September 2007 onwards, mainland Portugal 86
Table 3-20 - Requests for information in 2007 94
Table 3-21 - Complaints in 2007 95
Table 4-1 - Discrimination of costs payable for access to high pressure infrastructures 107
Table 4-2 - Average prices payable for access to high pressure (HP) natural gas infrastructures 107
Table 4-3 - Natural gas consumption 116
Table 4-4 - Natural gas prices published by Eurostat 120
Table 5-1 - Breakdown of generation 122

Table 5-2 - Consumption supply 122
Table 5-3 - Maximum annual power 123
Table 5-4 - Trend in maximum power 123
Table 5-5 - Existing power plants 124
Table 5-6 - Capacity margin 125
Table 5-7 - Trend forecast for SRG 126
Table 5-8 - Natural gas demand - business activity 127
Table 5-9 - Supplies of natural gas 127
Table 5-10 - Useful storage capacity and capacity of injection into RNTGN 129
Table 5-11 - LNG terminal traffic – unloading of LNG 129
Table 5-12 - RNTGN gas balance 130

1 INTRODUCTORY REMARKS

The year 2007 was characterised by a number of events that marked the development of the electricity and natural gas sectors in Portugal. One can highlight, on the one hand, the implementation of the Iberian Electricity Market (MIBEL) and, on the other, the first steps towards the economic regulation of the natural gas sector, following the consolidation of the organisational framework for the sector in 2006.

As far as MIBEL is concerned, one can highlight the agreement reached by the governments of Portugal and Spain on 8 March 2007 to harmonise a number of regulatory matters, with the aim of advancing the development and consolidation of the market. These regulatory matters were grouped into six main areas:

- Definition of general principles for the organisation and management of the Iberian Market Operator (OMI).
- Strengthening of the links between the Portuguese and Spanish system operators.
- Definition of common rules with a view to increasing competition in the MIBEL area and mitigating the risks of abuse of market power.
- Definition of a tariff harmonisation plan for the two countries, with special reference to the adaptation of the last-resort tariff calendar and the grid access tariffs.
- Implementation of a joint management mechanism for the interconnections between Portugal and Spain, based on the combined action of market splitting and explicit auctions.
- Harmonisation of the power guarantee mechanisms, with respect to the specificities of each system.

In terms of implementation, a number of studies promoted by the Council of Regulators were carried out, which were prepared by working parties which included representatives of the two sectoral regulators – ERSE and CNE – dealing with the following regulatory harmonisation aspects:

- Capacity guarantee mechanism (an incentive for the guarantee of supply);
- Division of the interconnection capacities between the market splitting mechanisms and explicit auctions;
- Presentation of a harmonised timetable for replacing all the meters with new ones that permit telemetering and a harmonised proposal on the minimum specifications and functionalities of the meters for the residential and small-sized company segments;
- Introduction of the concept of the dominant Iberian operator in the context of defining common rules for boosting competition in MIBEL, as a way of annually identifying the market agents that fulfil the condition of dominant operator and applying harmonised limitations and restrictions to those agents;

- Convergence of the access tariffs, so that the tariff structures in Portugal and Spain are similar under MIBEL;
- Harmonisation of the supplier switching procedures in the context of encouraging liberalisation.

All these tasks have now been completed and the respective conclusions submitted to the two governments, except the last two, which are currently being concluded.

As regards the strengthening and consolidation of the market, the termination of all the Power Purchase Agreements (PPAs) for the power plants held by the incumbent EDP Group, and the entry into force of a compensation mechanism for the stranded costs resulting from the loss of the contractual bond, created the conditions created for the launch of the organised electricity market at the Iberian level, which took place on 1 July 2007.

For the two PPAs that were not terminated, which are held by the independent operators Turbogás and Tejo Energia, operation of the respective power plants and the placement of the power they generate in the market are now carried out by a company set up specifically for that purpose.

In connection with the launch of the organised market and the national legal framework that made it possible, as far as tariff-related aspects are concerned attention is drawn to the extraordinary revision of the End User Electricity Sales Tariffs, which was justified by the need to accommodate the resulting regulatory changes. In this context, ERSE published new tariffs for sale to end users in August 2007, which were to be valid for the September – December 2007 period.

It should be noted that 2007 was the first full year of total liberalisation of the electricity sector, after the logistics platform started to come into operation on 4 September 2006, allowing standard low voltage customers (the great majority of whom are residential) to freely exercise their right to choose their supplier.

The number of customers in the liberalised market continued to grow during 2007 (rising from 30,000 at the end of January to approximately 150,000 on 31 December), despite the fact that the amounts transacted on this market increased only until June and then began to fall off due to a lesser degree of competitiveness as compared to the regulated market tariffs.

As regards the most important events in the natural gas sector, it should especially be noted that the restructuring process begun in 2006, which led to the reorganisation of the whole natural gas business sector, i.e. the legal and accounting separation of the operation of the natural gas infrastructures from the supply of natural gas, was continued in 2007. This was specifically reflected by: (i) the opening of the market to standard regime electricity producers; (ii) the separation of accounts (for all companies) and legal separation (for all companies with more than 100,000 customers) of the power distribution and supply activities.

In this new framework, it was important to define access tariffs that would reflect the costs incurred, and at the same time encourage investment. It is in this context that ERSE for the first time established the following tariffs for the gas year 2007/2008: (i) Use of the Liquefied Natural Gas Reception, Storage and Regasification Terminal; (ii) Use of Underground Storage; (iii) Use of the Transmission System; (iv) Access to Grids.

The tariffs for sale of gas to end users continued to be approved by the Ministry for the Economy and Innovation in 2007 through proposals submitted by the concession holders and licensed companies in accordance with the concession contracts in force.

Another aspect worth highlighting in this sector has to do with the work carried out with the aim of creating the Iberian Gas Market (MIBGÁS).

With this objective, and based on the guidelines contained in the aforementioned Compatibilisation Plan, the two regulators, ERSE and CNE, undertook a study in 2007, the conclusions of which were submitted to the respective governments in early 2008. This work included not only the operating principles for MIBGÁS but also a road map for its development.

The most important principles are: (i) the need to speed up the supplier recognition process; (ii) harmonisation of the access tariffs for grids and interconnections; and (iii) harmonisation of the rules on the creation of natural gas reserves.

The cross-cutting issues for the energy sector, that is, those pertaining to the environment, energy efficiency in consumption and consumer protection, continued to be areas of intervention for ERSE from the angle of contributing to the creation of ever better conditions for the sustained development of the sector.

As far as environmental aspects are concerned, work continued on monitoring the environmental performance of the regulated companies in terms of energy efficiency, and it should be noted that 2007 was the first year in which the Plan for the Efficient Use of Energy (PPEC) was applied.

Finally, consumer protection, which was a reference activity for ERSE in terms of exercising its regulation responsibilities, was subject to organisational reinforcement with a view to providing an increased response capacity, especially with respect to complaints, requests for information and clarification from the energy consumer.

ACRONYMS

- HV – High Voltage (effective voltage between phases greater than 45 kV and lower than, or equal to, 110 kV).
- ACE – Energy Consumers Support office.
- LV – Low Voltage (effective voltage between phases equal to, or lower than, 1 kV).
- SpLV – Special Low Voltage (effective voltage between phases equal to, or higher than, 1 kV and contracted power higher than 41.4 kW).
- StLV – Standard Low Voltage (effective voltage between phases equal to, or higher than, 1 kV and contracted demand power equal to, or lower than, 41.4 kVA).
- CAE – Power Purchase Agreement.
- CEER – Council Of European Energy Regulators
- CENELEC – European Committee for Electrotechnical Standardisation.
- CMVM – Securities Market Commission (Portugal).
- CNE – National Energy Commission (Spain).
- CNMV – Securities Market Commission (Spain).
- CR – Network Commercialisation activity.
- CUR – Last Resort Supplier.
- DGEG – Directorate General for Energy and Geology.
- ERGEG – European Regulators Group for Electricity and Gas
- ERSE – Energy Services Regulatory Authority.
- LNG – liquefied natural gas.
- VAT – Value Added Tax.
- VHV – Very High Voltage (effective voltage between phases greater than 110 kV).
- MIBEL – Iberian Electricity Market.
- LM – Liberalised Market.
- MV – Medium Voltage (effective voltage between phases greater than 1 kV and equal to, or lower than, 45 kV).
- OMEL – Operador del Mercado Ibérico de Energia – Pólo Español, SA.
- OMI – Iberian Market Operator.

- OMIClear – OMIClear – Sociedade de Compensação de Mercados de Energia, S.A.
- OMIE – Spanish Iberian Market Operator (spot market).
- OMIP – Portuguese Iberian Market Operator (derivatives market).
- DSO – Distribution Network Operator.
- TSO – Transmission Network Operator.
- SRG – Special Regime Generation.
- RAA – Autonomous Region of the Azores.
- RAM – Autonomous Region of Madeira.
- RMC – Regulations on Dispute Mediation and Conciliation.
- RND – National Electricity Distribution Network (high- and medium-voltage).
- RNT – National Electricity Transmission Network (Mainland Portugal).
- RNTIAT – National LNG Transport, Storage Infrastructure and Terminal Network
- RPGN – Public Natural Gas Network.
- RQS – Quality of Service Regulations.
- SEN – National Electricity System.
- SENV – Non-binding Electricity System.
- SEP – Public Service Electricity System.
- SNGN – National Natural Gas System.
- TGCC – Combined-cycle gas turbines.
- TGCS – Single-cycle gas turbines.
- UAG – Autonomous LNG Unit.
- GUoS – Global Use of System.
- DUoN – Distribution Use of Network.
- DUoN (HV) – Distribution Use of Network in HV.
- DUoN (LV) – Distribution Use of Network in LV.
- DUoN (MV) – Distribution Use of Network in MV.
- TUoN – Transmission Use of Network.
- VPP – Virtual Power Plants

2 SUMMARY/LAST YEAR'S MAIN EVENTS

2.1 ERSE ORGANISATIONAL STRUCTURE

2.1.1 CORPORATE BODIES

2.1.1.1 BOARD OF DIRECTORS

The ERSE Board of Directors is made up of:

- One chairperson.
- Two voting members.

Members of the Board of Directors are appointed by resolution of the Council of Ministers for a five-year term, which can be renewed once, on a proposal from the Minister for the Economy and Innovation. Selected people must have appropriate qualifications and well-established technical and professional skills. Their terms of office never begin at the same time. Persons who are serving, or have served in the last two years, on the corporate bodies of companies in the electricity and natural gas sectors, or who are or have been full-time employees of said companies, performing management or executive functions in the same period, may not be appointed as members of the Board of ERSE. When they end their term of office, members of the ERSE Board of Directors may not perform any functions in companies of the regulated sector, nor provide any services to them, for a period of two years. Members of the Board of Directors perform their functions on an exclusive basis, save that they may teach at higher education institutions on a part-time basis.

2.1.1.2 ADVISORY BOARD AND TARIFF BOARD

The Advisory Board is the ERSE corporate body responsible for advising, supporting and helping ERSE define its lines of action. The Advisory Board issues opinions on matters such as:

- The ERSE activity plans and budgets.
- The ERSE Annual Report and Accounts.
- ERSE opinions on safety standards.
- Proposed amendments to regulations.
- Other matters on which the Board of Directors may seek its advice.

The Advisory Board is made up of 28 members, including representatives from Central Government (Economy, Finance, Environment and Consumer Protection), the Regional Governments of the Azores

and Madeira, the municipalities, Public Administration (Directorate General for the Consumer, Directorate General for Energy and Geology, Portuguese Environment Agency), the Competition Authority, consumer associations and regulated companies. The Advisory Board has two sections: one for the electricity sector and one for the natural gas sector.

The Tariff Board is the body specifically in charge of providing advice and support in tariff and price-related matters. It is called upon to give its opinion on:

- Proposals for tariff regulations.
- Proposals for tariffs and prices.

The Tariff Board is made up of 17 members, including representatives from the Directorate General for the Consumer, the municipalities, consumer associations and the regulated companies. The Tariff Board has two sections: one for the electricity sector and one for the natural gas sector.

Opinions issued by the Advisory Board and Tariff Board are not binding. They are published by ERSE and made available for consultation on its website. Such publication must include justification for the position taken by ERSE whenever the advice given in the opinions issued is not followed.

2.1.2 MAIN STATUTORY OBJECTIVES

The main statutory objectives of ERSE are:

- To protect the rights and interests of consumers with regard to prices, services and quality of service, and to foster the provision of information and clarification to energy consumers, in coordination with the competent authorities.
- To ensure, while respecting the powers given to other entities, that natural gas and electricity operators comply with the public service obligations and other obligations established by law and in regulations, and in the concession contracts and licences.
- To arbitrate and settle disputes that may arise in the electricity and natural gas sectors, in accordance with the terms established by law.
- To implement the liberalisation of the electricity and natural gas sectors and foster competition, so as to improve the efficiency of the activities subject to its regulation.
- To ensure that regulation rules are objective and that the activity relationships amongst the operators and between the operators and the consumers are transparent.
- To contribute to the progressive improvement of the technical, economic and environmental conditions in the regulated sectors, in particular by encouraging the adoption of practices that promote the efficient use of natural gas and electricity and the creation of appropriate standards of service quality and environmental protection.

- To contribute to the progressive adaptation of the regulatory framework in line with the development of the electricity and natural gas sectors and to the prompt compliance with the applicable EU legislation, with a view to fully realising the single energy market.
- To coordinate, with the Competition Authority, enforcement of the competition law in the energy sector.
- To monitor the activities of similar regulators, as well as the experiences of foreign energy regulators, and establish relations with counterpart regulators and with the relevant EU and international agencies.
- To promote research on the electricity and natural gas markets and their regulation and to develop the initiatives and establish the association and cooperation protocols deemed appropriate, while preserving its independence.

2.1.3 POWERS

ERSE has varied powers: of regulation; of sanction; of inspection, and advisory powers. The main instruments at the disposal of ERSE in fulfilling its statutory objectives are described below:

Although ERSE is statutorily empowered to impose sanctions, the fact is that there is still no legal framework in place enabling it to exercise this power. To remedy this situation, in 2007 ERSE submitted to the government a draft bill that is still awaiting approval. Thus, in practice, ERSE can still not exercise this power. The lack of a legal framework allowing ERSE to impose sanctions weakens the effectiveness of its decisions and affects the regularity and good functioning of the sectors it regulates.

2.1.3.1 REGULATIONS

Publication of the ERSE regulations is preceded by public consultation, the procedure for which is established in Article 23 of the ERSE Statutes. In the context of this public consultation process, the opinions of the Advisory Board and the Tariff Board, depending on the matter at hand, are heard, as well as all other relative administrative bodies, consumer protection agencies and the regulated companies. The ERSE proposals and their justifying documentation are forwarded to the above entities and also placed on the ERSE website. Interested parties have a period of 30 days to submit their comments and suggestions. ERSE then proceeds to approve the regulations, justifying its decisions in a document and answering the comments and suggestions it receives. This document is published on the ERSE website, while the regulations are sent to the official gazette, *Diário da República*, 2nd Series, for publication.

In the context of the electricity sector, ERSE is responsible for preparing the following regulations and supervising their compliance:

- Access to Grids and Interconnections.

- Grid Operation.
- Commercial Relations.
- Tariffs.

It is also ERSE's duty to submit to the Directorate General for Energy and Geology (DGEG) a proposal for the commercial provisions of the Quality of Service Regulations, as well as to ensure full application of these regulations – including the technical provisions.

In the context of the natural gas sector, ERSE is responsible for preparing the regulations on the following and supervising their compliance:

- Access to Grids, Infrastructures and Interconnections.
- Infrastructure Operation.
- Quality of Service.
- Commercial Relations.
- Tariffs.

2.1.3.2 TARIFFS AND PRICES

ERSE periodically determines the tariffs and prices to be applied to the electricity and natural gas sectors. The tariffs and prices are determined in accordance with the Tariff Regulations for each sector.

Before ERSE approves the tariffs and prices, it consults the Tariff Board and considers the comments of the administrative bodies and the regulated companies.

The tariffs and prices are published in the *Diário da República*, 2nd Series.

2.1.3.3 PUBLIC SERVICE CONCESSIONS AND LICENCES

Without prejudice to the DGEG powers, ERSE has the power to verify, in regulatory matters, compliance with concession contracts, in line with the approved legal bases for such contracts, as laid down in Decree-Law no. 29/2006 and Decree-Law no. 30/2006, both dated 15 February 2006.

2.1.3.4 INSPECTION AND SANCTIONS

ERSE has the powers to inspect compliance with its regulations and decisions.

In the context of consumer protection, ERSE must regularly inspect the records of complaints and claims filed by consumers against concession or licence operators. ERSE may also order the investigation of

complaints or claims directly sent to it by consumers, as long as the matters in question fall within its remit.

ERSE may also recommend to concession or licence holders that they take action to address any fair complaints filed by consumers.

In the context of competition protection, ERSE must report to the Competition Authority any infringements of the competition law that may come to its knowledge as it performs its functions.

As mentioned above, ERSE also has the statutory power to impose sanctions.

2.1.3.5 INVESTIGATIONS AND AUDITS

ERSE may, on its own initiative or at the request of the Minister for the Economy and Innovation, order any inquiries, investigations or audits of the concession or licence holders, as long as they focus on matters falling within its remit. In the scope of supervising and verifying compliance with its regulations, ERSE may also order other audits, with particular reference to matters of quality of service and Commercial Relations of the agents.

2.1.3.6 SETTLEMENT OF DISPUTES AND VOLUNTARY ARBITRATION

ERSE's role in the area of dispute settlement essentially consists of taking evidence in mediation and conciliation proceedings. Mediation and conciliation are voluntary mechanisms for the extrajudicial settlement of disputes. Although ERSE cannot impose a solution in specific cases, it may recommend a solution (mediation), or suggest that the parties jointly find a solution for their dispute (conciliation).

In the wake of the EU recommendations on the principles applicable to entities operating in the field of the extrajudicial settlement of consumer disputes, in October 2002 ERSE approved its Regulations on Dispute Mediation and Conciliation (RMC).

As regards the extrajudicial settlement of disputes, it is also ERSE's responsibility to promote voluntary arbitration for the settlement of commercial or contractual disputes amongst concession and licence holders and between them and consumers. ERSE may also assist in the creation of arbitration centres and sign agreements with arbitration centres.

2.1.4 INDEPENDENCE AND ACCOUNTABILITY

2.1.4.1 INDEPENDENCE

ERSE is a legal person governed by public law, with administrative and financial autonomy and its own assets. It is governed by its own Statutes, by the legal provisions specifically applicable to it and,

subsidiarily, by the legal framework of state-owned enterprises, save any rules incompatible with its nature. ERSE performs its functions independently, in the framework of the law, without prejudice to the guiding principles of the energy policy established by the Government in accordance with the constitution and the law and the acts subject to ministerial supervision pursuant to the law.

Members of the Board of Directors can only be dismissed by the Government, in cases of legal incapacity or proven serious misconduct.

However, without prejudice to its organic and functional independence, which is confirmed formally in its Statutes, ERSE is, also according to its own Statutes, subject to the supervision of the Minister for the Economy and Innovation and, where applicable, the Minister for Finance. As a consequence, the following require ministerial approval:

- Activity plans and the budget.
- Annual reports and accounts.
- Regulation of services.
- Regulations on staff recruitment and the respective payroll.

The ERSE budget is an integral part of the State Budget. This incorporation restricts the independence of ERSE, subjecting the regulator, in general terms, to a financial scheme influenced by the Government – dependent upon clearance by the Energy and Finance Ministers, particularly as regards the acquisition of equipment and the recruitment of staff.

This ministerial supervision, which is strengthened by the fact that the ERSE budget was made a part of the State Budget in 2003 and became subject to the rules for execution of thereof (despite the fact that the revenue used for the ERSE operations comes solely from the tariffs paid by the consumers), affects its management autonomy, and naturally affects the principles of its independence, both financial and in the performance of its duties.

In order to guarantee its independence as a regulatory body, ERSE has demanded the management autonomy it considers essential, based on the following:

- The revenue for its operating budget comes exclusively from the tariffs paid by the consumers; ERSE does not benefit from any other resources from the State Budget.
- Management autonomy is the guarantee of its administrative, financial and technical independence, given that bodies subject to administrative and financial supervision, as a result of their budgets being part of the State Budget, are subject to ministerial supervision. Such ministerial supervision, regardless of the form it takes, constitutes an instrument for the Government to interfere in the work of an administrative body.

- Management autonomy is necessary to prevent regulatory capture by the regulated interests, to prevent partiality of decisions and improve their rationality, so that the underlying public interest is not put at risk. In the current situation, this ministerial supervision has a restrictive effect on management of the ERSE budget and its activities.
- ERSE is permanently subject to the scrutiny of its Advisory Board, which includes representatives of all the relevant interests in the regulated sectors: institutional, i.e. representatives of the Ministers for Finance and the Economy, the regulated companies and the consumers.
- ERSE is subject to inspection and auditing by the Court of Auditors.
- ERSE is subject to the supervision of the Statutory Auditor.
- ERSE is subject to other administrative audits and also promotes audits by independent external bodies.
- ERSE publishes its budgets and reports and accounts, notably on its website.

2.1.4.2 ACCOUNTABILITY

ERSE is accountable to the national governing bodies, as follows:

- ERSE has to submit its draft budget (which is an integral part of the State Budget) to the appraisal of its Statutory Auditor and the Advisory Board and to the subsequent approval of the Minister for the Economy and Innovation. The State Budget is approved by the National Parliament (*Assembleia da República*).
- The Annual Report and Accounts are also submitted to ERSE's Statutory Auditor and the Advisory Board, being subsequently submitted to the approval of the Economy and Finance Ministers.
- A report on its regulatory activities is also forwarded to the Government each year, to be appraised by the National Parliament.
- Whenever asked to do so, the Chairperson of the Board of Directors will answer any requests for a hearing that may be made by the competent parliamentary committee, providing information or clarifications on ERSE activities.
- ERSE is also accountable to the Judiciary, given that, pursuant to the law, the members of the ERSE corporate bodies, and its employees and agents, are liable in criminal and disciplinary terms for any acts and omissions practised while performing their functions.
- Administrative activities are subject to administrative jurisdiction, pursuant to administrative law. Generally speaking, sanctions for administrative offences imposed by ERSE can be contested in a court of law.

- ERSE is also subject to the jurisdiction of the Court of Auditors, pursuant to the applicable legislation.

2.2 KEY DEVELOPMENTS IN THE ELECTRICITY SECTOR AND THE NATURAL GAS SECTOR

2.2.1 WHOLESALE MARKET

2.2.1.1 ELECTRICITY SECTOR

The evolution of the wholesale market in Portugal in 2007 was naturally impacted by the developments in the Iberian Electricity Market (MIBEL) and, in particular, the steps taken to consolidate the integration of the Portuguese and Spanish markets.

Here, reference should be made to the agreement signed by the Portuguese and Spanish governments to harmonise their countries' regulatory frameworks, thereby furthering the development and consolidation of MIBEL. The matters covered by this agreement, which was signed on 8 March 2007, cover six main areas:

- Definition of the general organisational and managerial principles of the Iberian Market Operator (OMI), designed to integrate, in one single entity, the spot and futures contract branches.
- Consolidating cooperation between the Portuguese and Spanish system operators to help strengthen the interconnections between the two countries.
- Definition of common rules aimed at increasing competition within the MIBEL area and at mitigating the risks of abuse of market power, especially through the adoption of a harmonised and integrated dominant operator concept, with its respective obligations and restrictions.
- Definition of a tariff harmonisation plan for the two countries, with particular reference to the adaptation of the schedule for last resort tariffs and access tariffs and the rules that would serve as the basis for an interruptibility mechanism.
- Implementation of a joint management mechanism for the interconnections between Portugal and Spain, based on joint action on market splitting and explicit auctions, with the aim of optimising the use of the interconnections and boosting competition in the markets.
- Harmonisation of the power guarantee mechanisms, with respect to the specificities of each system.

Further in the context of the aforementioned agreement of 8 March, the possibility of holding Virtual Power Plant auctions (VPPs)[1] was established, with the aim of encouraging the emergence of new suppliers in the MIBEL and, thus, contributing to creating a more competitive and more open Iberian market.

In general terms, the implementation of the VPPs in Portugal has enabled the emergence of entities interested in acquiring options on the purchase of electricity other than the agents that had traditionally operated as suppliers in the market. However, the exercise of purchase options by these entities was not followed by their entry into the energy supply segment. Instead the entities mostly chose to place the product of their purchase options on the daily market.

The launch of the MIBEL daily market, which is managed by OMEL, was one of the most important developments in the Portuguese wholesale market in 2007. On 15 June 2007 all power purchase agreements (PPAs) with the power stations held by the incumbent EDP Group were terminated. This led to the entry into force of a compensation mechanism for the stranded costs resulting from the loss of the contracts, with only two PPAs with two power plants remaining in force. The operation of these power plants and the placement on the market of the power generated are handled by an enterprise called REN Trading, created as a subsidiary of the parent company (REN SGPS) that owns the transmission grid operator. Following the termination of the PPAs, as of 1 July 2007 the standard regime electricity generators now make their sales offers in a market context.

In the six months of operation of the Iberian daily market there was a considerable saturation of interconnection in relation to the Portuguese importer and a resulting continuation of a system of market separation. Indeed, for approximately 80% of the time, the price formed in the daily market differed between Portugal and Spain, reflecting the fact that market-generated transactions used up the whole interconnection capacity that was commercially available. The average size of the price differences between Portugal and Spain during the second half of 2007 was €10/MWh.

The existence of these price differences in the daily market, which are to be expected given the structural differences between the two Iberian systems, particularly in terms of the types of power generation used in Portugal and Spain, serves to highlight the as yet insufficient degree of integration of the two markets and the corresponding need for structural actions aimed at intensifying market integration.

[1] *Virtual Power Plant*

2.2.1.2 NATURAL GAS SECTOR

Despite the opening of the market to power plants in 2007 there is still no wholesale market worth mentioning.

2.2.2 RETAIL MARKET

2.2.2.1 ELECTRICITY SECTOR

DEVELOPMENT OF THE MARKET

It should be noted that 2007 was the first full year of total liberalisation of the electricity sector, after the operation of the logistics platform began on 4 September 2006, allowing standard low voltage customers (the great majority of which are residential customers) to freely exercise their right to choose their supplier.

However, although it is true that 2007 stood out for the fact that it was the first full year of the liberalised electricity market, it is also noteworthy that the share of power supplied via the liberalised market in the overall national market fell, as compared with 2006, and this decrease was particularly pronounced from the beginning of the second half-year.

The explanation for this reduction in the share of the consumption of energy from the liberalised market lies primarily in the fact that the regulated tariffs in 2007 included a subsidy equivalent to the deficit resulting from the tariffs having increased less than the normal price increase rate, in accordance with a Government decision (Decree-Law no. 237-B/2006 of 18 December). In addition to this, there were other circumstances that also contributed in varying degrees to a fall from the liberalised market. The first factor has to do with the trend in prices for electricity supplied in the liberalised market, especially in the daily market. Here there was an upward trend over the year, in particular in the second half of 2007. The *ex-ante* deficit was added to an *ex-post* deviation.

The rising trend in energy prices in the wholesale markets is a factor contributing to the reduced competitiveness of the suppliers, all the more evident as, over the year, the reference and price comparison standards were stable – essentially, the regulated tariffs for supply by the last resort supplier. Furthermore, the fact that the business groups – with the exception of the EDP group, where the suppliers are integrated – do not have generation resources in Portugal and that there is no prior capacity allocation mechanism in the interconnection to allow bilateral energy transactions, are additional difficulties for supplying energy in the open market.

Another factor that led to the open market suppliers being less competitive than the last resort suppliers has to do with the termination of the PPAs and the beginning of the CBMC (contractual balance

maintenance costs) mechanisms. Given the high costs of the PPAs, compared with the energy price implicit in calculating the CBMCs (€50/MWh) that is considered in defining the tariffs, their termination entailed, in the short term, a reduction of the costs to be recovered through the electricity tariffs for the last resort supplier's customers, given that it annulled and overlaid the effect of the increase in the access tariffs resulting from the compensation for the CBMCs, which are paid by all consumers. Thus, the situation for the last resort supplier's customers was improved by the termination of the PPAs and the beginning of the CBMCs, while the opposite was true for the liberalised market customers.

At any rate, in 2007 in the context of identifiable obstacles to consolidating the process of liberalisation of the retail electricity market, there is no factor at all that can be related to the supplier switching procedures. Indeed, judging by the lack of complaints from the market agents involved and the performance indicators for the supplier switching management platform, it may be concluded that the decrease in the liberalised market cannot be attributed to a lack of operative information on the change, a lack of security or robustness of the process or lengthy execution times.

END USER SALES TARIFFS

As regards the development in the tariffs for the sale of electricity to end users, mainland Portugal experienced the following nominal change, differentiated by voltage level and supply type, in 2007 compared with 2006:

Table 2-1 - Nominal change in end user sales tariffs 2007/2006

	Variation 2007/2006
End-user Tariffs	**6,2%**
NV End-user	6,7%
VHV End-user	8,0%
HV End-user	7,9%
MV End-user	6,2%
LV End-user	6,0%
SpLV End-user	5,9%
StLV> 20,7 kVA End-user	6,0%
StLV< 20,7 kVA End-user	6,0%
PL End-user	6,0%

Following the launch of the organised market on 1 July 2007, Decree-Law no. 264/2007 brought about the extraordinary revision of electricity tariffs in 2007. Thus, in August 2007, ERSE published new tariffs for the period September – December 2007, implementing the main regulatory and legislative modifications up to that date.

The extraordinary tariffs in force from 1 September 2007 onwards were based on the same assumptions as the tariffs for 2007, published in December 2006, with the exception of the PPA-related assumptions and those relating to the purchase of electricity by the last resort supplier. The amendments introduced by Decree-Law no. 264/2007 allowed the consolidation of the MIBEL integration process, focusing on: (i) the activity of overall management of the system as a result of the early termination of the PPAs and, consequently, the Global Use of System tariff and the Grid Access tariffs; and (ii) the electricity purchasing activity by the last resort supplier and, consequently, the sale tariffs for end users. Some of the most important changes introduced were:

- Termination of the purchase of electricity by the electricity transmission system operator.
- Formulation of the last resort supplier's costs of buying and selling electricity in a market environment, which have an effect on the energy tariff.
- Introduction of payment of Contractual Balance Maintenance Costs (CBMCs) in the power contracted in the Global Use of System tariff.
- Inclusion, in the Global Use of System tariff, of a cost for the purchase and sale of electricity by the Commercial Agent (REN Trading) responsible for management of the power purchase agreements for those power stations for which the PPAs remained in force.

- Increase of the cost for special regime generation[2] included in the Global Use of System tariff in relation to the value taken into account in the tariffs approved in December 2006, as a result of the reduction in the cost of purchasing electricity for the last resort supplier and, consequently, the energy tariff (resulting in an increase in the cost difference for special regime generation).

2.2.2.2 NATURAL GAS SECTOR

In 2007 the end user tariff prices continued to be approved by the Ministry of the Economy and Innovation, based on proposals submitted by the concession and licence holders. In the first half of 2008 the responsibility for this approval will be transferred to ERSE.

2.2.3 INFRASTRUCTURES

2.2.3.1 ELECTRICITY SECTOR

The most important developments in 2007 in terms of electricity sector infrastructures have to do with the grid access tariffs and the allocation of interconnection capacity.

GRID ACCESS TARIFFS

As far as the Grid Access Tariff prices is concerned, the following nominal changes occurred in 2007 compared with 2006, differentiated by voltage level and type of supply:

[2] Power generation from renewable sources and cogeneration. In practice, special regime generation is similar to the concept of distributed generation.

Table 2-2 - Changes in Grid Access Tariffs in mainland Portugal 2007/2006

	Variation 2007/2006
Access Tariffs	**11,3%**
VHV Access	0,6%
HV Access	2,0%
MV Access	3,6%
SpLV Access	4,6%
StLV Access	15,2%

As mentioned earlier, in August 2007 ERSE published new tariffs for the September – December 2007 period.

INVESTMENT IN DIRECT LINES (ARTICLE 22)

There was no investment in direct lines pursuant to Article 22 of Directive 2003/54/EC of 26 June in 2007.

ALLOCATION OF INTERCONNECTION CAPACITY

The Iberian Market came into force on 1 July 2007 with a single daily market and a mechanism for the allocation of capacity by implicit auction, as described in Section 3.1.2.

As regards interconnection congestion, a high number of hours in which the interconnection points were used at full capacity in the Spain – Portugal direction was registered, as shown in the following table:

Table 2-3 - Monthly development in situations of congestion in the Portugal/Spain interconnection in 2nd half of 2007

Month	Congestion		Price differential (€/MWh)	
	no. hours	% hours/month	Maximum	Average
July	552	74,2	32,4	8,3
August	627	84,3	23,7	8,6
September	587	81,5	23,7	8,6
October	597	80,0	36,5	8,0
November	556	77,0	45,6	11,8
December	641	86,0	60,1	15,5

Source: ERSE, OMEL

2.2.3.2 NATURAL GAS SECTOR

The most important developments in 2007 related to the natural gas sector infrastructures concerned the grid access tariffs and the allocation of capacity.

GRID ACCESS TARIFFS

The tariff structure fixed by ERSE for the 2007-2008 gas year was altered in accordance with that established in the Tariff Regulations published in September 2006. The changes in the tariffs shown in the following table relate to the deliveries of natural gas to users of the infrastructures.

Table 2-4 - Change in access tariffs 2006-2007/2007-2008

	Variation 2007-2008/2006-2007
Use of LNG Reception, Storage and Re-gasification Terminal Tariff	-16,3%
Use of Underground Storage Tariff	-30,3%
Access to high pressure Grid Tariff (Transmission Use of System +Global Use of System)	-5,4%

The grid access tariff is the sum of the Transmission Use of Network tariff plus the Global Use of System tariff (for the coordination and technical management of the National Natural Gas System).

INVESTMENT IN DIRECT LINES (ARTICLE 24)

There was no investment in direct lines as defined in Article 24 of Directive 2003/55/EC of 26 June in 2007.

ALLOCATION OF CAPACITY

The natural gas infrastructures are very recent in Portugal and their capacity by far exceeds present needs. Accordingly, no congestion has been registered in National Natural Gas System infrastructures. Nevertheless, the regulatory framework approved in 2006 and in force in 2007 includes a mechanism for allocating available capacity and provides for the possible occurrence of congestion, defining the principles to be adopted in such situations.

2.2.4 REGULATION/UNBUNDLING

2.2.4.1 ELECTRICITY SECTOR

The electricity transmission system operator in mainland Portugal is independent – both legally and in terms of assets – of all other activities in the electricity sector. The distribution system operator, which is part of the EDP group, is legally independent of the other companies in that group, specifically those operating in electricity generation and supply.

As far as the role of the transmission system operator is concerned, its role as technical manager of the system should be noted. This consisted of exchanging information with the market operator and the agents, which included:

- Demand forecasts.
- Calculation of the interconnection capacity available for commercial purposes.
- Operation programming.
- Generation resources used to satisfy demand.
- Account settlement/adjustment.

At the operating markets level (secondary, tertiary and technical restrictions), the transmission system operator is responsible for their management and settlement.

2.2.4.2 NATURAL GAS SECTOR

Pursuant to Decree-Law no. 30/2006 of 15 February, the principle of separation – both legal and in terms of assets – of natural gas-related activities applies to the natural gas sector. Hence, the transmission system operator is independent, in terms of assets, of the other activities in the natural gas sector. Furthermore, the distribution system operators have legal independence in relation to companies within the same business group that are responsible for the supply or sale of natural gas.

Within the scope of the Overall Technical Management of the System, the transmission system operator has been made responsible for the settlement/adjustment of accounts, which includes procedures relating to the balance of the National LNG Transport, Storage Infrastructure and Terminal Network (RNTIAT) infrastructures.

The transmission system operator is responsible for determining the quantities of natural gas (stocks) held by each individual market agent in each of the infrastructures that make up the RNTIAT, i.e. the Liquefied Natural Gas (LNG) transport network, LNG terminals and underground natural gas storage facilities. Each of the RNTIAT infrastructures is considered, in accordance with the regulations in force, a balance zone, which functions as a physical support for the trading of natural gas between market agents that take place in the national natural gas system.

The transmission system operator must be informed of the trades in natural gas between market agents carried out in the system's infrastructures. Such transactions may be motivated in the context of the gas supply market or in the context of the management of the daily balance between the supply and demand of natural gas.

2.2.5 SECURITY OF SUPPLY

2.2.5.1 ELECTRICITY SECTOR

Monitoring and guaranteeing supply in the electricity sector is the responsibility of the Government, through the DGEG, in cooperation with the transmission system operator. Pursuant to Article 63 of Decree-Law no. 29/2006 of 15 February, monitoring and security of supply include, in particular, the balance between supply and demand in the market, the level of forecast demand and the available supply, the supplementary capacity available or under construction, as well as the possible promotion of the building of new power stations. For security of supply purposes, the DGEG submits to the Ministry of the Economy and Innovation a report drawn up in accordance with Decree-Law no. 72/2006 of 23 August. The transmission network and electricity distribution development plans established in that law are also an integral part of the principle of security of supply. ERSE issues its opinion on the investments earmarked in these plans.

In recent years there has been considerable investment in terms of special regime generation (in the last 5 years its share in meeting demand rose from 8% to 20%). This trend is expected to continue for the next few years, in addition to the increase in installed capacity in terms of combined cycle and hydroelectric power stations.

In 2007 the electricity consumed was supplied by the following sources: natural gas (21%), net import (15%), fuel oil (2%), coal (23%), large hydroelectric power stations (19%) and Special Regime Generation (SRG) (20%).

The capacity margin, which is defined as the difference between the installed generation capacity and the maximum annual demand peak, was 35% in the last two years, while in 2005 it was 33% and in 2004 30%[3]. For more detailed information, see Section 5.1.1, "Brief Summary of 2007".

2.2.5.2 NATURAL GAS SECTOR

As in the electricity sector, in the natural gas sector the Government, represented by the DGEG, is responsible for monitoring and securing supply, in cooperation with the transmission system operator. In this case, Article 57 of Decree-Law no. 30/2006 of 15 February and Decree-Law no. 140/2006 of 26 July are the laws providing the framework, respectively, for the monitoring and security of supply and the terms of the report to be submitted to the Minister for the Economy and Innovation. Here too ERSE issues an opinion on the investments envisaged in these plans.

The National Natural Gas System has two interconnection points – Campo Maior and Valença do Minho – and an LNG terminal in Sines.

The main sources for the supply of natural gas to Portugal are those provided by the long-term contracts signed between Transgás and Sonatrach (Algeria) and Nigerian LNG, Limited (Nigeria).

The natural gas underground storage infrastructure consists of four salt caverns, three of which are in operation and one is still under construction. The underground storage sites also use surface facilities.

Expansion of the storage infrastructure is planned, with the construction of two more underground caverns in addition to the four existing ones, and the expansion of the surface storage capacity.

Following the entry into force of Decree-Law no 140/2006 of 26 July, some of the measures recommended in Council Directive 2004/67/EC of 26 April were adopted in Portugal with a view to guaranteeing the security of the natural gas supply. In addition to the principles that were to govern the development of the natural gas sector in Portugal in terms of security of supply, specific obligations of the market agents were also defined as far as the constitution of security reserves are concerned. Furthermore, the opening up of the natural gas market that is currently underway has created expectations in terms of the presence of new market agents, which are expected to have a positive impact on the diversification of supply sources.

[3] Note, however, that the relative growth in the share of SRG, particularly wind energy, implies the need for greater capacity margins.

2.2.6 MAIN LEGISLATIVE ALTERATIONS

2.2.6.1 NATIONAL LEGAL FRAMEWORK

ELECTRICITY SECTOR

In the course of 2007 important amendments to the legal instruments governing the Portuguese energy sector, and in particular the electricity sector, were made. These were largely brought about by the entry of MIBEL into full operation on 1 July 2007.

In the electricity sector, following the legislation published in 2006 that provided the new framework for the Portuguese electricity sector, i.e. Decree-Law no. 29/2006 of 15 February, which transposed Directive 2003/54/EC of the European Parliament and Council of 26 June into the national legal system, and Decree-Law no 172/2006, which completed it, the year 2007 saw the publication of a series of laws pertaining to the consolidation of MIBEL, in particular Decree-Law no. 199/2007 of 18 May and Decree-Law no 264/2007 of 24 July.

Decree-Law no. 199/2007 of 18 May amended Decree-Law no. 240/2004 of 27 December, which created the "Contractual Balance Maintenance Costs" (CBMCs) mechanism for the Power Purchase Agreements, in that it updated some of the fuel cost values and market prices referred to in the amended instrument. The CBMCs are the compensation paid to the energy producers for the stranded costs resulting from the termination of the PPAs as a result of the liberalisation of the ordinary generation regime market.

Decree-Law no. 264/2007 of 24 July established a set of measures aimed at consolidating MIBEL, namely, on the purchase of electricity by the last resort supplier and the management of electricity generated by the power plants that retained their PPAs.

For 2007 one can also highlight the following amendments to the legal framework that had an effect on the end user sales tariffs:

- Ministerial Order no. 481/2007 of 19 April, which amended Ministerial Order no. 96/2004 of 23 January, determining the revision of the remuneration rates for the plots of land in the domain of public water resources where power plants are located.
- Decree-Law no. 226-A/2007 of 31 May, which approved the new regime for the use of water resources. This law established specific rules on the allocation of rights of use for the water resources to the companies owning power plants as well as on the payments by the latter for the transfer of the rights of use from the transmission system operator to the power plant owning companies. Part of the economic/financial balance relating to the rights of use of the public waterways domain allocated to hydroelectric power stations was aimed at amortising the tariff

deficits for 2006 and 2007, the recovery mechanisms for which are defined in Decree-Law no. 237-B/2006 of 18 December.

- An Order from the Minister of the Economy and Innovation on the amortisation of the tariff deficits for 2006 and 2007.

The operations of ERSE in view of the amendments to the regulatory framework for the electricity sector is dealt with in Section 2.3.

NATURAL GAS SECTOR

In the natural gas sector, the restructuring process that began in 2006 with the approval of Decree-Law no. 30/2006 of 15 February, which defined the general principles for the organisation and operation of the National Natural Gas System (SNGN), transposing Directive 2003/55/EC of the European Parliament and Council of 26 July into the national legal system, led to the reorganisation of the whole natural gas entrepreneurial sector, more precisely to the separation, in legal and accounting terms, of the activities of natural gas infrastructures operation and the supply of natural gas. This process continued in 2007 with the opening of the market to the standard regime electricity generators in line with the calendar for the liberalisation of the natural gas market defined at the Council of Ministers of 22 June 2006. In 2007 the separation in accounting terms (for all companies) and legal terms (for companies with more than 100,000 consumers) of the activities of distribution and supply was also realised.

The work of ERSE in view of the amendments to the regulatory framework for the electricity sector is dealt with in Section 2.3.

2.2.6.2 3RD PACKAGE OF COMMUNITY DIRECTIVES

Significant progress was achieved in diverse areas of the European Energy Market in 2007.

As already mentioned, the Iberian electricity and natural gas markets made considerable progress towards integration, in the context of MIBEL and MIBGÁS. Simultaneously, the regional ERGEG markets that include Portugal, i.e. the South-West Europe Regional Electricity Market (ERI) and the South-West Europe Regional Gas Market (GRI), also progressed in terms of greater integration. This is particularly the case for the ERI, for which the appointment of a Special Representative of the President of the Commission was followed by bilateral political agreements aimed at resolving the decade-long impasse in establishing the interconnection on the Franco-Spanish border.

Another important area of progress in implementing the European Energy Market was the legal framework. In early 2007 the Commission presented what has been termed the “3rd Package” of proposals for an important revision of the EU legislation on the energy markets. In the light of the obstructions to competition observed in several national energy markets and the great disparity in

practices between the different regulatory bodies (NRAs), the 3rd Package proposes a greater degree of harmonisation and coordination of the regulatory practices (including the creation of an Agency for Cooperation between Energy Regulators), an increase in the regulatory powers and greater independence for the NRAs, as well as effective unbundling of the energy sector companies, so that the natural monopoly of system management is effectively independent of the activities of energy generation and supply.

Operations in both the electricity and gas sectors in Portugal are already totally separated, the process for the separation of ownership having begun more than 10 years ago. Nevertheless, ERSE, as a member of CEER and ERGEG, has been actively involved in the discussions at the European level on the 3rd Package. ERSE is a member of the 3rd Package Working Group and actively participates in most of the Working Group and Focus Group sessions. In the initial documentation presented to the Commission in April 2007 in reaction to the first draft of the 3rd Package, the CEER response included the Portuguese experience in relation to the separation of ownership, containing comparative data and respective analyses of the investments, the quality of service and the costs in the transmission of electricity for a period of 30 years, which includes periods of vertical integration, legal separation and total separation of property.

2.3 MAIN MATTERS DEALT WITH BY ERSE

In addition to its regular tasks, in particular those of defining the tariffs and earnings of the regulated activities and implementing the liberalisation of the electricity and natural gas sectors, ERSE worked on several other activities during 2007.

These activities can be grouped as follows:

- Development of the electricity market.
- Development of the natural gas market.
- The environment and energy efficiency.
- Consumer protection.

2.3.1 DEVELOPMENT OF THE ELECTRICITY MARKET

After the total opening of the market for all electricity consumers in 2006, the year 2007 saw a very important step in the liberalization of the electricity market on the supply side. With the termination of the power purchase agreements, as of 1 July 2007, all the electricity generated by the standard regime power plants in Portugal was traded in the spot and forward energy markets in the Iberian market. This measure

achieved the implementation of the liberalisation of the electricity market on the supply side and was, at the same time, an important step towards realising the Iberian Electricity Market (MIBEL).

AMENDMENTS TO REGULATIONS

Along with the aforementioned alterations to the legal framework, in 2007 ERSE also amended the Tariff Regulations, the Commercial Relations Regulations and the Regulations for Access to Grids and Interconnections.

This process had begun in late 2006 with the first submission to the Tariff Board of a proposal for the amendment of the Tariff Regulations. In April 2007 all the regulations were submitted for public consultation. Taking into account the diverse legislative and structural changes that had occurred in the meantime, ERSE subsequently reformulated the proposals to amend the Commercial Relations Regulations and the Tariff Regulations. It once again submitted proposals for alterations to these regulations and to the System Operation Regulations to public consultation in June 2007. The new regulations were published on 10 August 2007 by Order no. 17744-A/2007.

Of the main changes implemented, attention is drawn to those relating to the purchase of electricity by the last resort supplier in the markets and to the special regime generators, the incentives for efficient management of the PPAs that remained in force and management of the CO_2 emission licences by regulated companies, the consideration of a power guarantee mechanism, as well as a mechanism for the joint management of the interconnections between Portugal and Spain.

The two main regulatory aspects for motivating investment in electricity sector infrastructure are:

- The joint management mechanism for the interconnections between Portugal and Spain.
- A regulatory methodology, which already exists, based on the remuneration of the net assets allocated to the activities of electricity transmission and overall system management at a predetermined rate and the acceptance of the respective amortisations as regulatory costs.

Following the approval of Decree-Law no. 264/2007, as already mentioned, ERSE published new tariffs for sale to end users and grid access for the period September - December 2007.

The following table shows the changes in the end user tariffs as of 1 September 2007 compared with those approved in December 2006. The overall tariff difference was -3.1%, though it was differentiated by voltage level and tariff option.

Table 2-5 - Change in tariffs for end users from September 2007 onwards, mainland Portugal

	Variation 2007Sep/2007Jan
End-user Tariffs	**-3,1%**
NV End-user	-4,3%
VHV End-user	-1,0%
HV End-user	-1,1%
MV End-user	-5,8%
LV End-user	-2,6%
SpLV End-user	-5,5%
StLV> 20,7 kVA End-user	-3,2%
StLV< 20,7 kVA End-user	-2,2%
PL End-user	-1,0%

The table below presents the difference in the grid access tariff in effect from 1 September 2007 and those approved in December 2006.

Table 2-6 - Change in grid access tariffs as of September 2007, mainland Portugal

	Variation Set07/Jan07
Access Tariffs	**10,6%**
VHV Access	17,8%
HV Access	14,0%
MV Access	7,9%
SpLV Access	6,3%
StLV Access	11,5%

BUILDING MIBEL

ERSE's contribution to creating MIBEL is defined in the Santiago de Compostela Agreement signed by Portugal and Spain. The creation of a Council of Regulators is established in that agreement. The board

is made up of representatives of the Portuguese Securities Market Commission (CMVM) and the Portuguese Energy Services Regulatory Authority (ERSE) and, representing Spain, the National Securities Market Commission (CNVM) and the National Energy Commission (CNE). The purpose of the Council of Regulators is to coordinate supervision of the markets defined in MIBEL.

Following the 22nd Portuguese-Spanish Summit held in late 2006, an agreement was reached on 8 March 2007 on the "Regulatory Compatibilisation Plan for the Energy Sector in Portugal and Spain", already referred to in Section. 2.2.1. In order to implement the plan, various studies were planned by the Council of Regulators, and in this context a number of working parties were set up for the following areas of regulatory harmonisation:

- Capacity guarantee mechanism (an incentive for the guarantee of supply):
  - Following a public consultation process undertaken by the Council of Regulators a harmonised proposal was submitted to the Governments of Spain and Portugal at the end of May 2007 for the application of the power guarantee mechanism. In practice, the Spanish Government applied a mechanism that differed from that submitted by the Council of Regulators, while no capacity guarantee mechanism has yet been approved by the Portuguese government despite the fact that it is included in the ERSE regulations.
- Division of the interconnection capacities between the market splitting mechanisms and explicit auctions:
- The proposal of the Council of Regulators was submitted to the Portuguese and Spanish Governments at the end of May 2007. In July 2007, ERSE defined the joint management mechanism for the interconnections, and in December 2007 it also approved the joint rules for contracting interconnection capacity between Portugal and Spain. On the Spanish side, although approved by the regulator, the rules for the contracting of interconnection capacity between Portugal and Spain have not yet been published by the Government. For the present, all interconnection capacity is allocated to the market splitting process.
- In accordance with what has been approved, the division of the interconnection capacity to be allocated in the annual, quarterly and monthly explicit auctions would be 15% in each time frame, i.e. 45% of the total for the explicit auctions, with the remaining capacity being allocated to the daily market (55%).
- Presentation of a harmonised timetable for the replacement of all meters with new ones that allow telemetering and a harmonised proposal for the minimum specifications and functionalities of the meters for the residential and small company segments:
  - As Spain already has produced legislation on this matter, ERSE autonomously carried out a public consultation that resulted in the submission of a proposal to the Portuguese

Government in early December 2007. ERSE is now awaiting a decision from the Government on its proposal.

- Introduction of the concept of the dominant Iberian operator in the context of defining common rules for boosting competition in MIBEL, as a way of annually identifying the market agents that fulfil the condition of dominant operator and applying harmonised limitations and restrictions to those agents:
  - The Council of Regulators submitted its proposal to the two Governments in early 2008 and we are currently awaiting legislative initiatives on this matter.
- Convergence of the access tariffs so that, in the context of building MIBEL, the tariff structure is similar in Portugal and Spain, while allowing each country to calculate and set the amount of its own tariffs, so that each sustains the costs of the respective system:
  - ERSE and the CNE began to prepare a document in 2007 that would guide the discussion on the rules of good practice to be followed in the process of defining and approving the access tariffs with a view to their harmonisation. This document will be made available for public discussion in 2008.
- Harmonisation of the supplier switching procedures in the context of stimulating liberalisation:
  - In the second half of 2007, ERSE and the CNE analysed the situation in each country, studied examples of international good practice and consulted the market agents involved on the matter of harmonising the supplier switching procedures. As a result of these studies, a document was drawn up that formed the basis for the launch of a public consultation process at the beginning of 2008.

Note that ERSE, in collaboration with the CNE, conducted a study that determined the electricity purchase obligations on OMIP for the Portuguese last resort supplier and the Spanish distributors and led to the submission of various proposals aimed at improving OMIP's liquidity.

Alongside these working parties, ERSE is developing, internally or together with the other members of the Council of Regulators, a number of activities in the context of MIBEL market supervision. Thus, at the internal level, the information on the functioning of the daily market and forward market is undergoing a systematic analysis. This is leading to various reports and studies aimed at analysing the way the markets operate and the behaviour of the market agents.

The Council of Regulators envisages its members exchanging the information necessary for the Council to perform its duties. Additionally, joint action procedures can be adopted and joint supervision or investigation teams can be set up. Furthermore, the Council of Regulators' Technical Committee gathers information from the market operators and the system operators, either by specifically requesting it or

through the regular submission of information by these bodies to the Committee, draws up the "Monthly MIBEL Report" and analyses any incidences and regulatory modifications that occur.

MARKET MONITORING AND SUPERVISION

The Council of Regulators is responsible for monitoring the operation of the MIBEL markets and for the coordination and performance of its members in exercising their supervision powers. In this context, information sharing mechanisms have been implemented so that the regulators may monitor the operation of the daily and forward markets. In addition to this, under its powers, ERSE has monitored the system services and retail markets.

Now that the electricity market has been totally liberalised, cooperation between ERSE and the Competition Authority has become particularly important to ensuring the competitive functioning of the markets. In accordance with the law, a number of reports were produced on operations involving energy sector agents that affected the functioning of the market.

Furthermore, any restriction on competition that entails an increase in the costs of the electricity consumed by users could mean that this increase would not be accepted in defining the electricity tariffs. This happened after an analysis of the daily and intradaily electricity markets relating to 22 July 2007, on the basis of which ERSE concluded that the energy supplies on the intradaily market by far exceeded the normal level in competitive terms, leading to an abnormal increase in the energy purchase costs for the last resort supplier on that day, which could not be taken into account for the purpose of defining tariffs.

2.3.2 DEVELOPMENT OF THE NATURAL GAS MARKET

The process of preparing the liberalisation of the natural gas sector that began with the restructuring of the market and the separation of activities in the preceding years was continued with the opening of the natural gas consumption market to electricity generating plants. As mentioned above, the year 2007 saw the separation in accounting terms (for all companies) and legal terms (for companies with more than 100,000 customers) of the distribution and supply activities.

DEFINITION OF ACCESS TARIFFS AND GENERAL CONTRACTING CONDITIONS

In this new context, in which possession of the infrastructures was separated from the activity of supplying natural gas, the guarantee of free access to the infrastructures involves the establishment of fair access tariffs that seek to reflect the costs incurred, while at the same time stimulating investment. Thus, for the gas year 2007-2008, the first tariffs were established for:

- Use of the Liquid Natural Gas Reception, Storage and Regasification Terminal.
- Use of Underground Storage.

- TUoN – Transmission Use of Network.
- Access to Grids.

Given that the natural gas sector in Portugal is a very recent sector, the aim was to base the tariffs on underlying regulation principles that encourage investment, applying regulation that guarantees return on such investment. However, the fact that the infrastructures are not yet being used to their full capacity could mean that the current consumers would have to pay a cost due to the below-capacity use of the infrastructures. This problem was overcome by defining a smoothing mechanism for the revenue the companies are entitled to in a given year, based on the total number of concession years, taking into account the planned use of the infrastructures. This method also allows investments planned for the years following the year in which tariffs are defined to be entered in the accounts for that year. The forecast amounts are then adjusted, taking into account the real values.

The tariffs for sale to end users were still approved by the Ministry for the Economy and Innovation in 2007. However, after the separation of accounts of the supply and distribution activities in 2007, the bases were set for establishing end user tariffs, natural gas distribution tariffs and natural gas sales tariffs for the 2008-2009 gas year, especially in terms of defining the information needed.

At the same time, in July 2007 ERSE approved the general terms and conditions for the supply contracts between the retail last resort supplier and non-eligible consumers, i.e. those with an annual consumption of 10,000 m^3 or less. Subsequently, in October 2007 ERSE approved the general terms and conditions for contracts for the use of the infrastructures, i.e. the LNG terminal, the underground storage facilities and the transmission network.

BUILDING MIBGÁS

In addition to ERSE defining the first tariffs, another area in which it contributed to the liberalisation of the gas sector was its work towards the creation of the Iberian Gas Market or MIBGÁS. Thus, as defined in the “Regulatory Compatibilisation Plan” for the energy sector in Portugal and Spain, the two regulators, ERSE and CNE, prepared a document (subject to public consultation, which took place in November 2007), which was submitted to the two Governments in early 2008. The document defines the principles for the operation of the MIBGÁS and also a road map for its development. The most important principles are: (i) the need to speed up the supplier recognition process; (ii) harmonisation of the access tariffs for grids and interconnections; and (iii) harmonisation of the rules on the creation of natural gas reserves.

2.3.3 THE ENVIRONMENT AND ENERGY EFFICIENCY

THE ENVIRONMENT

ERSE has statutory responsibilities in relation to the environment, although these are indirect, namely, the obligation to contribute to progressive improvement in the environmental conditions in the regulated sectors.

In this context, ERSE paid particular attention in 2007 to:

- Monitoring initiatives in the context of climate change:
  - The National Programme on Climate Change (PNAC); European Greenhouse Gas Emission Allowance Trading; and investments in Kyoto Protocol flexibility mechanisms, primarily the Clean Development Mechanisms. In this context, ERSE developed a tariff mechanism that encourages efficient management of the CO_2 emission allowances by the regulated companies.
- Special Regime Generation (SRG):
  - Although the responsibility for defining energy policies lies with the government, ERSE closely monitors the development of the sector given the importance of this type of power generation to meeting domestic demand and the fact that, in the terms established by the Government, the remuneration for electricity from such generation sources gives rise to a cost that is reflected in the electricity tariffs approved by ERSE.
- Environmental performance of regulated companies:
  - In the electricity sector, the regulated companies have promoting actions aimed at improving their environmental performance. ERSE has been developing these actions since 2002 as part of the Environmental Performance Promotion Plan (PPDA). As of 2008 companies in the natural gas sector will begin implementing similar actions.

ENERGY EFFICIENCY

In 2006 ERSE developed a mechanism for promoting energy efficiency that was given the name of Plan for the Efficient Use of Electricity (PPEC). Its rules were published in Order no. 16122-A/2006 of 3 August. The PPEC was first applied in 2007.

The PPEC is a voluntary plan. Companies operating in the electricity sector can apply to the PPEC, through measures to promote energy efficiency. These applications are assessed and the best measures are selected by merit, i.e. they are classified according to an evaluation scale up to the amount set for the PPEC for the respective year. Ultimately, the main beneficiaries of the measures adopted – the

consumers – pay for the PPEC through the electricity tariffs. Financing for the measures is only guaranteed to the companies after submission of the half-yearly progress reports and documentary proof of expenditure, and the signed statements of liability.

Applications submitted in 2006 for 2007 and in 2007 for 2008 considerably exceeded the PPEC's annual budget of 10 million euros.

2.3.4 CONSUMER PROTECTION

Consumer protection is a part of all regulatory initiatives and decisions, thus:

- The promotion of transparent and fair Commercial Relations rules, and tariffs and prices that reflect efficient costs.
- The guarantee of quality of services provided.
- The promotion of information and clarification for consumers.

Consumer protection activities currently take the form of:

- Regulatory measures, such as the approval of general contractual conditions for the supply of natural gas.
- Ascertaining compliance with the regulations applicable in the electricity and natural gas sectors, as a result of which initiatives may be promoted to correct any non-compliance noted, especially by holding meetings with the companies concerned, or sending official letters from ERSE explaining the right way to apply the regulations.
- Providing information to consumers:
  - As an example of the disclosure of information to the consumer and an incentive for the companies to provide information themselves, note the work begun by ERSE in 2007 on good labelling practices in the electricity sector, i.e. the identification of the primary energy sources used in generating the electricity and their respective environmental impact. In addition simulators are provided on the ERSE website for the customers of the last resort suppliers to calculate their electricity bills, and also to compare tariffs for standard low voltage (StLV) supply on the liberalised market.

To ensure that energy consumers have the essential resources to access the information and mechanisms that enable them to effectively exercise their rights, a dedicated consumer support task force (ACE) was set up in 2003 for the integrated and articulated support of all consumer support-related activities, in particular those relating to complaints, requests for information and clarification from the energy consumer. ACE has dedicated consumer service channels that include telephone and online services, written correspondence and person-to-person service.

In the electricity sector in 2007 the matters that received the greatest number of complaints were billing, quality of services and damage to electrical appliances. As far as the natural gas sector is concerned, quality of service, billing and the installation and maintenance of gas equipment in buildings received the most complaints.

3 REGULATION AND PERFORMANCE IN THE ELECTRICITY MARKET

3.1 REGULATION MATTERS

3.1.1 GENERAL

The total liberalisation of the market for mainland Portugal has been established in legislation since August 2004. The specific provisions that apply to the opening of the market and corresponding definition of eligible customers are set forth in the Commercial Relations Regulations approved and published by ERSE, which establish the right of all consumers to freely choose their electricity supplier.

The opening of the Portuguese electricity market was phased in over four distinct periods in which the regulations were enforced. These phases can be briefly summarised as follows:

- Up to 31 December 2001, the SENV was only open to medium voltage[4] (MV), high voltage[5] (HT) and very high voltage[6] (VHV) consumers, with a minimum annual consumption of 9 GWh.
- From 1 January 2002 to the end of February 2004, all electricity consumer installations in VHV, HV and MV were considered eligible.
- Following the publication in 2004 of Decree-Law 36/2004, of 26 February, special low voltage (SpLV)[7]customers with a non-zero (actual or forecast) consumption were also considered eligible.
- Once published, Decree-Law 192/2004, of August 17th, extended the right of eligibility to all customers in mainland Portugal. Exercise of the right to choose standard low voltage (StLV) electricity customers to choose supplier became effective with the implementation of the information system required for managing supplier switching procedures. The system came into operation on 4 September 2006.

This means that, bearing in mind that the effective conditions for the total opening of the market were only in place in September 2006, 2007 was the first full year in which the retail electricity market was totally liberalised in mainland Portugal.

[4] Effective voltage between phases higher than 1 kV and lower than or equal to 45 kV.

[5] Tensão entre fases cujo valor eficaz é superior a 45 kV e igual ou inferior a 110 kV.

[6] Effective voltage between phases higher than 110 kV.

[7] Effective voltage between phases equal to, or higher than, 1 kV and subscribed power higher than 41.4 kW).

In early 2006, in compliance with the regulatory provisions on this matter, ERSE approved the procedures for switching suppliers, focusing on simplicity of the processes, transparency and non-discrimination between agents.

For the purposes of switching electricity supplier, the following types of electricity contract are considered:

- Signing an electricity supply contract with the suppliers.
- Signing an electricity supply contract with last resort suppliers.
- Contracting electricity on the organised markets or via bilateral contracts, in the case of customers who are market agents.

The existence of debts to a last resort supplier that are not contested in a court or through a body with power to impose extrajudicial settlements on disputes, prevents a customer from choosing a new supplier.

Customers have the right to change their electricity supplier up to 4 times in each period of 12 consecutive months. No charge may be levied for switching supplier. The adoption of a limit to the number of times a customer can switch suppliers was designed to find the middle ground between the right of free choice of the customer and the existence of costs for the system as a whole.

The last resort suppliers are obliged to provide a universal electricity supply service, guaranteeing that the needs of all customers that request it are met. The tariffs and prices practised by the last resort suppliers are approved by ERSE.

The suppliers are entities which operate in accordance with the licence or registration attributed by the Directorate General for Energy and Geology. Suppliers are free to charge the prices they deem appropriate.

Portuguese legislation provides for the creation of an independent logistics operator to operate the supplier switching process. In a transitional phase, until creation of this supplier switching logistics operator, this role is assigned to the operator of the high and medium voltage transmission network.

The current procedures, which were approved by ERSE, define the processes and deadlines necessary for the effective establishment of supplier switching, indicating the obligations of informing all parties involved in the process, as well as the format for messages to be exchanged in this context. The logistics of switching supplier in Portugal is based on the exchange of electronic messages between the main agents involved. Mechanisms for auditing the processes by external independent entities are provided for.

The interlocutor of the customer interested in changing supplier is the new supplier. It initiates the change process through an initial access to the record of the delivery point, on the basis of the information

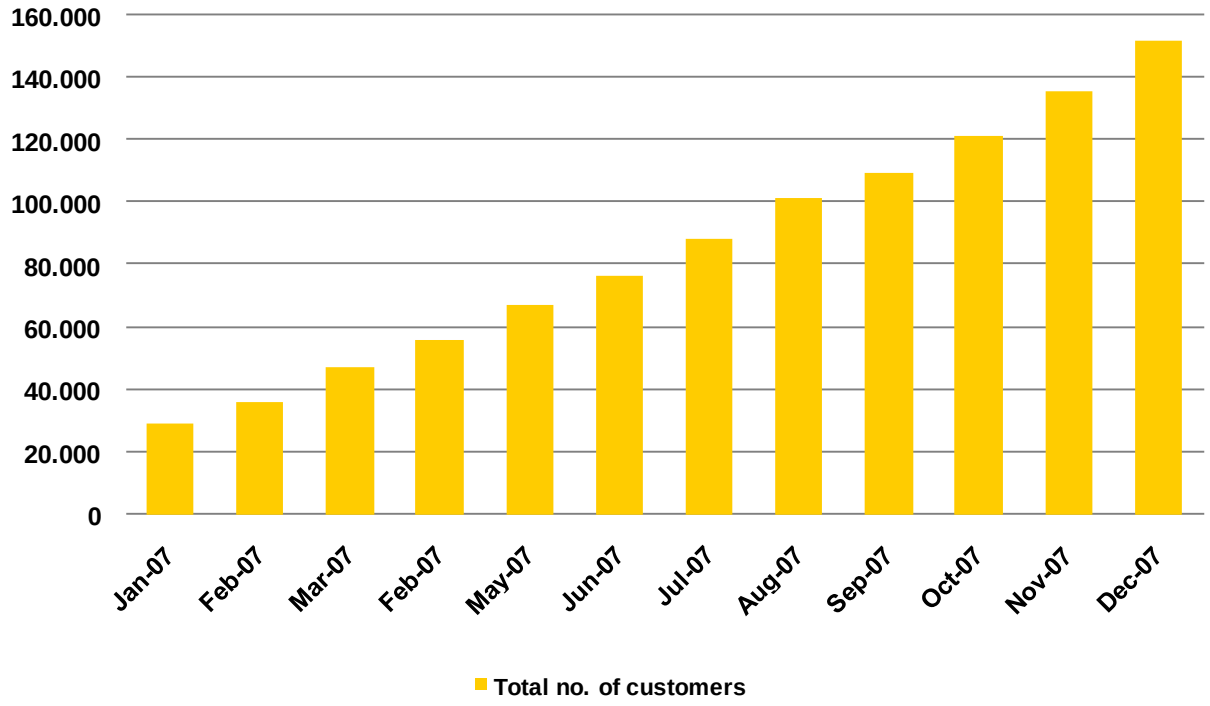
provided by the customer. Among the information required for validating access to record of the delivery point, the delivery point code, which unequivocally identifies an electrical installation, is of particular importance.

For the purpose of accessing the delivery point record, the new supplier must have express authorisation from the customer.

The development in the number of customers in the liberalised market in 2007 reflects the effective implementation of the total opening of the market in September 2006. An analysis of Figure 3-1 shows that, between the beginning and end of 2007, the number of customers in the liberalised market grew fivefold, going from 30,000 at the end of January to just over 150,000 as at 31 December. Of the total number of customers, the great majority are StLV customers, which are essentially domestic customers. They made up 73% of the total number of customers at the beginning of 2007 and almost 95% at the end of the year.

The information on the number of liberalised market customers does not include renegotiated contracts that may have resulted in more favourable electricity supply conditions for the customers. Indeed, the regulations for the electricity sector do not provide for the reporting of this information to entities that monitor the retail market, in this case ERSE. The distribution of customers in the liberalised market by the different suppliers is presented in Section 3.2.2.

Figure 3-1 - Total number of customers in the liberalised market in 2007

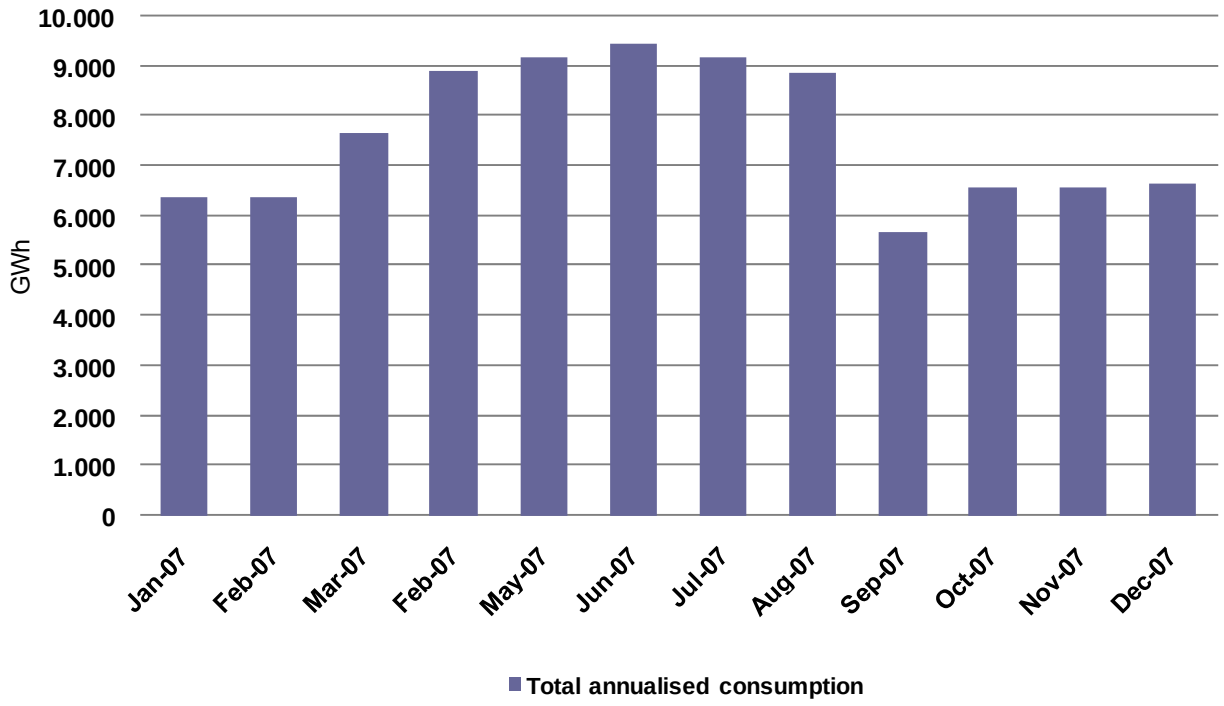


On the other hand, the growth trend in effective consumption in the liberalised market (see Figure 3-2) was less sustained in 2007 than the growth in the number of customers. Indeed, it may be said that there was a trend towards growth in the annualised monthly consumption[8] up until mid-year, from which point the trend was reversed. There was a reduction until September, with an increased being registered in October, and the figures then remained stable until the end of the year.

The drop in the relative weight of consumption by industrial clients (medium, high and very high voltage customers) and the increase in the relative weight of domestic customers played a significant role in this development. Up until mid-year, the industrial customer segment accounted for 80% of consumption in the liberalised market, showing some growth in absolute terms and representing a relative weight of just over 2/3 in December. The domestic customer segment, on the other hand, showed a constant growth trend over the year, both in absolute terms and in terms of relative share of total consumption. It ended the year being 13% of the total consumption (as opposed to 2% in January).

[8] The annualised monthly consumption is extrapolated from the real monthly consumption for a full year of consumption, in a scenario in which one assumes that clients neither enter nor leave the liberalised market.

Figure 3-2 - Consumption in the liberalised market in 2007
(Annualised monthly consumption)



3.1.2 CONGESTION MANAGEMENT MECHANISMS FOR ALLOCATING AVAILABLE CAPACITY AT THE INTERCONNECTIONS

The Iberian Electricity Market (MIBEL) officially began operation on July 1. It is based on a single daily market (OMEL) and the Mechanism for Joint Management of the Portugal-Spain Interconnection.

The management of the interconnections between Portugal and Spain is based on the Mechanism for Joint Management established by the two countries, the rules and principles for which are set forth in the following regulations:

- EC Regulation no. 1228/2003 of the European Parliament and the Council and Decision no. 006/770/EC, which amends its annex.
- Access to Grids and Interconnections Regulations (RARI).
- Procedures Manual for the Mechanism for Joint Management of the Portugal - Spain Interconnection.
- Joint Rules for Contracting Capacity in the Portugal – Spain Interconnection.

Pursuant to the RARI, the transmission system operator in mainland Portugal, in its role as System Manager, is responsible for determining and disclosing the interconnection capacity available for commercial purposes in cooperation with its Spanish counterpart, as well as for managing the Portugal – Spain interconnection by means of the Mechanism for Joint Management of the Portugal – Spain Interconnection. This mechanism aims to allocate physical interconnection capacity rights and to manage the interconnections (PTR) by coordinating:

- The holding of explicit capacity auctions, in a time frame preceding the daily time frame.
- Implicit allocation in the process of normal functioning of the daily and intradaily market, resorting to the possible need for market splitting into two price areas if there is congestion of the international interconnection.

The Joint Management of the Portugal – Spain Interconnection Mechanism likewise serves to manage any revenue from the allocation of the interconnection capacity, that is, revenue from explicit auctions and revenue from the difference in prices between the two price areas that arises when the market is split due to congestion of the interconnection.

EXPLICIT AUCTIONS

The explicit capacity auctions are organised in three different time frames – annually, quarterly and monthly – by the transmission system operators, in their role as system managers.

The timetable for the various auctions is published on the Internet sites of the two transmission system operators. Before each auction is held the specifications for them are indicated, as well as the minimum capacity available in each direction and the deadlines for receiving offers.

In accordance with what has been approved by the MIBEL Council of Regulators at its meeting of 22 May 2007, the share of the interconnection capacity to be allocated in the annual, quarterly and monthly explicit auctions is 15% of the interconnection capacity in each time frame, with the remaining capacity being allocated on the daily market (55%).

As a general principle the explicit auctions must allocate the maximum capacity allowed, guaranteeing that the net balances of the interconnection programmes do not exceed the maximum value available at that interconnection in a specific flow direction.

The auction sessions must be coordinated with the Spanish system operator, allocating the capacity on the basis of the prices offered, beginning with the highest price offer, until the capacity available for that auction has been used up.

The allocation of capacity must result in a firm obligation of payment on the part of the market agent to which capacity is allocated, on the basis of the auction closing price and the capacity allocated to it. Thus,

whenever the value of the capacity offered and put up for auction by the operators, at zero price, is higher than the aggregate supplies from the agents, there will be no payment at all made by the market agents. Otherwise, or in the event that not only the initial capacity made available by the operator is placed in auction, but also the capacity offered by other agents (at zero price) and acquired by them in previous auctions, the allocation of capacity results in a firm obligation of payment for the bidding agent.

The capacity allocated in explicit auctions can be used by the agents or sold (or transferred) to other agents by means of a bilateral agreement or subsequent auction sessions. If the total capacity offered is not allocated, or if the agents do not intend to use it, it will be made available for the daily market, with the initial holder being recompensed for making the capacity available (the "Use It or Get Paid for It" principle).

The result of each auction session, i.e. the transmission operators in Portugal and Spain shall coordinate the publication of the amounts allocated and the respective auction closing prices.

Although planned, no explicit capacity auctions were held in 2007.

IMPLICIT ALLOCATION ON THE DAILY MARKET AND MARKET SPLITTING

Before each daily market session, the Portuguese and Spanish transmission network operators must coordinate the forwarding of information to the daily and intradaily market operator on the interconnection capacity available for inclusion in the clearing price mechanism.

As a general principle, and as in the case of explicit auctions, the clearing price mechanism should allocate the maximum capacity permitted, guaranteeing that the net balances of the interconnection programmes are not higher than the maximum value available at the interconnection in a specific flow direction.

Whenever, following the clearing price mechanism, a balance is produced at the interconnection that is higher than the available capacity, only sales offers from the exporting area leading to the maximum interconnection capacity limit are accepted, with the remaining demand from the importing area being met through sales offers from the importing area that were initially not accepted. This produces two market areas with different clearing prices, with the price being lower in the exporting area and higher in the importing area (higher priced sales offers). This separation into two price areas is what is known as market splitting.

Market splitting gives rise to revenue corresponding to the product, in each hour, of the interconnection capacity effectively used by the difference in price between the two areas. This revenue will serve as the basis for compensating the agents that transfer their capacity rights.

REDUCTION OF THE INTERCONNECTION CAPACITY AVAILABLE FOR COMMERCIAL PURPOSES

Whenever the operation of either of the electricity systems is found to lead to alterations (reduction) in the interconnection capacity in either direction, the transmission system operators should coordinate their action, as follows:

a) If interconnection congestion is identified before communication of authorisation for scheduling, the transmission operators must publish new interconnection capacity values, and whenever necessary, the capacity associated with the physical capacity rights should be reduced through a process of proportional allotment between the physical capacity rights obtained previously, regardless of the time frame in which they were acquired. Following such situations, the market agent whose interconnection capacity is reduced, will be entitled to financial compensation in proportion to the reduced interconnection capacity and to the difference in prices caused by the market splitting process (importing area price minus the exporting area price).

b) Should the capacity be reduced after notification by the market agents, the capacity rights and the respective schedulings are considered firm. The transmission system operators, in their role as system managers, must then carry out the necessary balance actions (redispatching in both the electricity systems), except in unforeseeable circumstances or cases of force majeure.

c) Should the capacity be reduced after notification by the market agents and result from unforeseeable circumstances or a situation of force majeure, the agent's capacity will be reduced, by allotment. It will, however, receive compensation depending on the amount of the reduced capacity valued at the averaged weighted price of the prices in the explicit auctions in which the physical capacity rights associated with this scheduling were acquired.

ALLOCATION OF CONGESTION REVENUE

The term "compensation revenue" is used to define revenue from:

- Firm payment obligations resulting from explicit capacity auction sessions.
- The difference in area prices after application of market splitting.

Pursuant to the RARI and the Procedure Manual for the Portugal – Spain Interconnection Joint Management Mechanism, these earnings should prioritarily serve as:

- Financial compensation for those market agents which, holding physical interconnection capacity rights allocated in explicit auctions, do not indicate their intention to use that capacity and transfer it to the daily market.
- Financial compensation for those market agents which hold physical interconnection capacity rights allocated in explicit auctions but cannot use them, either partially or wholly, due to a

reduction in the interconnection capacity subsequent to those auctions (but prior to notification of the use of the capacity - scheduling).

- Financial compensation paid by the exporting electricity system to the importing system for power that is not exported as a result of the reduction in the interconnection capacity, valued at the exporting area price. The congestion revenue associated with the power that is not exported, valued on the basis of the price difference between the areas in the congested direction must also be returned to the importing system.

3.1.2.1 ELECTRICITY GRID ACCESS TARIFFS

FORMS OF REGULATION

The allowed income and the forms of economic regulation for operating the systems and other regulated activities are established in the Tariff Regulations.

The economic regulation carried out by ERSE (and thus the procedures used to establish the regulation parameters) differ depending on whether one is dealing with regulation by costs applied to the electricity transmission and system management activities by the transmission system operator, REN, or to the distribution activities by the regulated companies in the Autonomous Regions, EDA and EEM, or regulation by maximum price applied to the electricity distribution activity by the distribution system operator, EDP Distribuição.

Regulation by costs, which stimulates investment, is applied to the transmission network in mainland Portugal and the system operators in the Autonomous Regions. In this form of regulation, the main regulatory parameter is the capital cost rate, as this is the rate used for remuneration of the asset base accepted for regulation. This parameter is calculated at the beginning of each regulation period. In the most recent regulatory periods it was determined on the basis of internal ERSE studies. The calculation method for the capital cost has been based on the Capital Asset Pricing Model (CAPM).

For the electricity distribution activity, the basic formula is

$$F \times (IPC - X_F) + W \times P \times (IPC - X_P)$$

where:

F = Fixed tranche;

P = Variable tranche;

W = Delivered energy;

RP = Change in the consumer price index;

X_F = Efficiency gain associated with the fixed tranche;

X_P- Efficiency gain associated with the variable tranche.

This regulation formula relies on the establishment of a basic fixed tranche of the allowed income and a base variable tranche (unit price of distributed electricity), both differentiated by voltage level. These vary (usually at a decreasing rate) throughout the regulation period in line with changes in the consumer price index, minus the efficiency factors X_F and X_P respectively. Determination of a cost of capital for EDP Distribuição is a need inherent to the remuneration of this activity, and it underlies the calculation of the base prices. In addition, the determination of the appropriate X parameters per voltage level has been just essential to securing the economic regulation of the electricity distribution activity. Initially ERSE calculated these parameters based on a benchmarking study carried out by an international consultant. These parameters have been be updated since, on the basis of internal ERSE studies. For the 2006 – 2008 regulation period, efficiency gains were calculated by analysing the controllable operating costs in different areas of the electricity distribution network. Several stochastic cost frontiers were thus determined, against which the efficiency gains have been measured.

PROCEDURES AND METHODOLOGY FOR CALCULATING ELECTRICITY GRID ACCESS TARIFFS

ERSE is in charge of preparing and publishing the Tariff Regulations, establishing in detail the methodology for calculating tariffs and prices and the forms of regulation of the allowed income. Before approval, the Tariff Regulations is submitted to public hearing and is subject to an opinion issued by the Tariff Board.

Tariff calculations must comply with the calculation methodology previously established in the Tariff Code. The tariffication process – including its timeframe, is also laid down in the regulations. The tariffication process – including its timeframe, is also laid down by the Regulations. By 1 May each year, the regulated operators send to ERSE the previous year's physical and accounting data. Estimates for the current year and forecasts for the coming year must be forwarded by 15 June. Based on this information, plus possible additional clarifications, ERSE drafts a duly justified tariff proposal that must be submitted to the Tariff Board by 15 October. The Tariff Board, made up of representatives of the consumers and regulated operators, appraises the proposal and sends its opinion to ERSE by 15 November. Taking into account this (non-binding) opinion, by 15 December ERSE publishes the tariffs that will be in force as from 1 January the following year.

The following brief description of the Portuguese tariff system serves to contextualise the tariff calculation methodology.

The Grid Access Tariffs are charged to all electricity consumers for the use of the infrastructures. Generally speaking, these Grid Access Tariffs are paid by suppliers on behalf of their customers. They may also be directly paid by customers that also function as market agents (i.e., customers that buy energy directly in the market and are responsible for managing their scheduling imbalances).

The existence of last resort suppliers leads to the application of End User Tariffs to their customers. These tariffs are calculated by adding to the Grid Access Tariffs the Supply Tariff and the Energy tariff. These last two tariffs reflect the commercial management costs incurred by last resort suppliers and the energy supply costs incurred by them to supply their customers – either in organised markets or in the context of bilateral agreements subject to prior approval by ERSE.

ELECTRICITY SECTOR TARIFFS AND REGULATED ACTIVITIES

Income generated by regulated activities is recovered by way of specific tariffs, each with its own tariff structure and characterised by a given set of billing variables.

Tariff prices are established in each activity in a way that, on the one hand, their structure reflects the structure of marginal or incremental costs and, on the other, enables the recovery of income generated by each activity.

Tariff charging and billing are based on the principle of non-discrimination as regards the final energy use. Tariff options are available to all consumers.

The Global Use of System tariff makes it possible to recover income generated by the global system management activity – including (i) operation of the system, ERSE-related costs; (ii) transfers to the Competition Authority; (iii) costs relating to the organised markets; (iv) costs due to tariff convergence in the Autonomous Regions; (v) costs due to the Plan for the Efficient Use of Electricity; (vi) costs due to generation from renewable energy sources and other energy policy costs. From September 2007 onwards this tariff has also been serving to recover the contractual balance maintenance costs (CBMC), which serve to compensate those electricity producers whose Power Purchase Agreements (PPAs) have terminated for the resulting stranded costs.

The Transmission Use of Network tariff makes it possible to recover income generated by the electricity transmission activity – including the establishment, operation and maintenance of transmission grids.

The HV and MV Distribution Use of Network tariffs make it possible to recover income generated by the regulated HV and MV distribution activities, which correspond to the planning, establishment, operation and maintenance of distribution networks with a view to transporting electricity from the points of reception to the end users. Likewise, the LV Distribution Use of Network tariff makes it possible to recover income generated by the regulated LV electricity distribution activity and the rentals for municipal concessions Costs relating to promoting environmental quality, in the context of the Plan for Promoting

Environmental Performance, are recovered by way of the HV, MV and LV Distribution Use of Network tariffs.

The Network Commercial Management tariff makes it possible to recover income generated by the network commercial management activity, which includes activities such as the contracting, metering, billing and settlement of services associated with the use of systems and other regulated services, as well as costs associated with the supplier switching procedure management.

Also, the Energy Tariff and the Supply Tariff have been established in the framework of the last resort supply.

The Energy Tariff makes it possible to recover income from the regulated buying-and-selling activity developed by last resort suppliers, including the costs of electricity purchased in the market to supply their customers. Up until the end of June 2007 the PPAs were still in force, with REN being responsible for purchase the electricity consumed. As of 1 July, after termination of 31 of the 33 PPAs, the last resort supplier purchase electricity in the organised markets or through bilateral agreements approved in advance by ERSE.

The Supply Tariff makes it possible to recover income from the regulated activity carried out by the last resort supplier, involving the commercial structures for the sale of electricity to its customers – namely contracting, billing and the service of electricity bill collection.

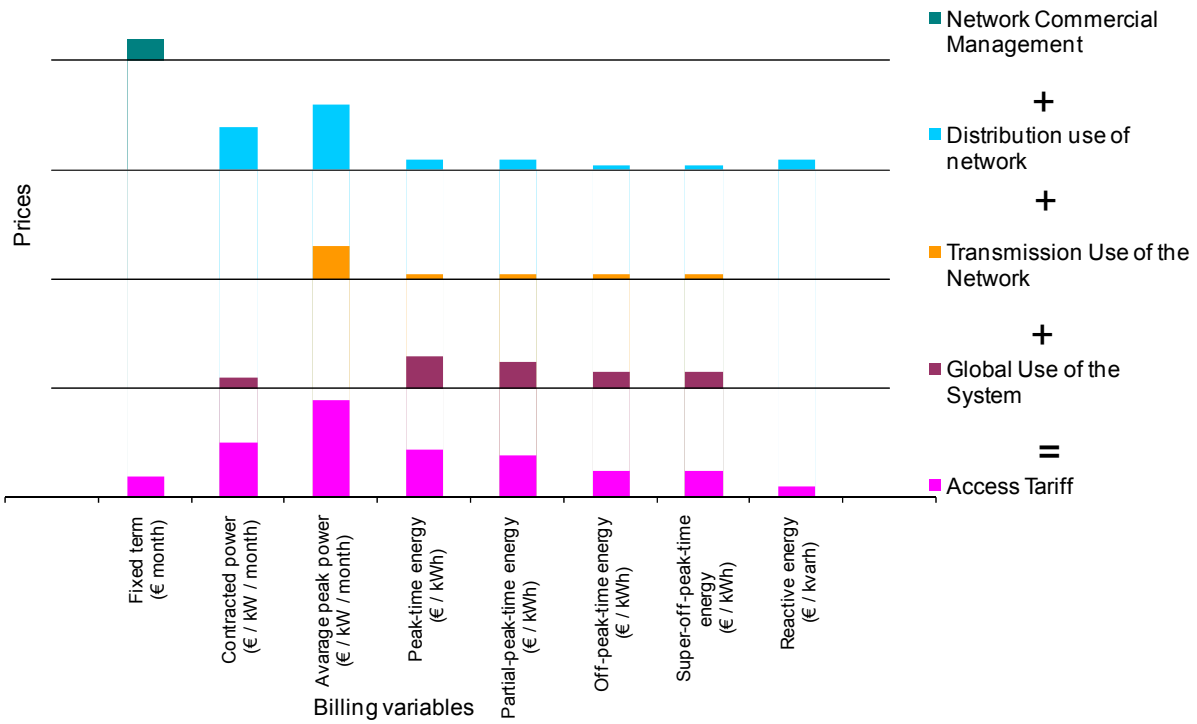
TARIFF ADDITIVITY APPLIED TO GRID ACCESS TARIFFS

The grid access tariff paid by all electricity consumers includes the following tariffs: Global Use of System, Transmission Use of Network, Distribution Use of Network and Network Commercial Management. Customers that have chosen their supplier in the market pay the grid access tariffs and freely negotiate their purchase of energy with their supplier.

Calculation of end user tariffs charged by the last resort supplier to its customers is based on the tariffs by activity included in grid access, plus the Energy Tariff and the Supply Tariff.

Prices of access tariffs for each billing variable are determined by adding up the corresponding tariff prices by activity. A simplified description of this tariff calculation methodology, called tariff additivity, is given in Figure 3-3.

Figure 3-3 - Tariff additivity used for calculating the access tariff



If tariffs that compose the sum are based as much as possible on marginal costs, this helps avoid inter-costumer cross-subsidisation. The closer the prices of such tariffs are to the marginal costs, the closer one comes to an efficient allocation of resources that maximises social well-being.

This tariff calculation methodology allows for a detailed knowledge of all tariff components by activity or service. Thus, customers know exactly how much they pay, for example, for using the MV distribution network and how that value is considered in terms of billing. This enables the possibility of breaking down the customer's bill, if requested, into each different regulated tariff component applicable, by average price and by tariff term. This possibility is provided for in the electricity sector regulations.

It should be noted that tariffs are charged by delivery point. Their prices, if necessary, are converted into different voltage levels – by applying loss adjustment factors. Where the metering equipment does not enable direct application of the billing variables of activity-specific tariffs, then prices to be applied to the metered variables are calculated, based on consumption profiles that are typical for each tariff option.

Transparent definition of the tariffs – resulting from the implementation of this type of system – is especially important to customers who have no experience in choosing suppliers, in particular those less informed.

PRICES OF ELECTRICITY GRID ACCESS TARIFFS

Table 3-1 identifies the cost components included in the grid access tariffs for 2007, which were valid until the extraordinary tariff revision in September 2007. The table also shows the amount of income proportionate to each of the individual tariffs. As already mentioned above, for access to the grid electricity users pay several costs related to general economic interest or energy policy. These are: premiums for special regime generation (renewable energy sources and co-generation), land belonging to the public water domain, OMIP-related costs, costs with ultraperipheral island regions, rents for municipal concessions, Competition Authority, Plan for the Efficient Use of Electricity and Plan for Promoting Environmental Performance.

Table 3-1 - Discrimination of costs included in the grid access tariffs, January to August 2007

ACCESS TARIFFS	REVENUES (10^3 EUR)	COST COMPONENTS	(%)
GLOBAL USE OF THE SYSTEM	538.368	System management	9
		System services	8
		Energy Services Regulatory Authority (ERSE)	1
		Competition Regulatory Authority	0
		Special-regime generation cost differential	69
		Land belonging to the Public Domain Water Space	10
		OMIP, S.A. and OMICLEAR, S.A.	0
		Plan for Promoting Efficiency in Electricity Use	2
		Autonomous Regions' Convergence Overcost	0
TRANSMISSION USE OF NETWORK	194.204	Transmission Grid	100
HV/MV DISTRIBUTION USE OF NETWORK	449.854	Distribution Grid	99
		Plan for Promoting Environmental Performance	1
LV DISTRIBUTION USE OF NETWORK	663.340	Distribution Grid	65
		Plan for Promoting Environmental Performance	0
		Concession rents paid to Municipalities	35
NETWORK COMMERCIAL MANAGEMENT	151.911	Metering, billing and settlement of access tariffs	100

Table 3-2 to Table 3-4 present the prices paid for grid access in High Voltage (HV), Special Low Voltage (SpLV) and Standard Low Voltage (StLV) from January to August 2007 by customers with a contracted demand power lower than 20,7kVA, and two active-energy prices differentiated by day/night period (two-rate time-of-day tariff).

The prices have been unbundled by tariff for each activity (Global Use of System, Transmission Use of Network, Distribution Use of Network and Network Commercial Management) and billing variable (Fixed term, Contracted Power, Active Energy and Reactive Energy).

The prices of the grid access tariffs for each voltage level are determined by adding up, for each billing variable, the tariff prices by activity converted to the voltage level of the energy delivered. For example, the price for contracted power in peak times for access to SpLV grids is obtained by the sum of peak time

power prices of the following tariffs: Transmission Use of Network (HV), Distribution Use of Network (HV), Distribution Use of Network (MV) and Distribution Use of Network (LV).

Table 3-2 - Prices for grid use by HV customers, January to August 2007

HV ACCESS TARIFF PRICES									
Tariff	Fixed term (EUR/month)	Power (EUR/kW.month)		Active energy (EUR/kWh)				Reactive energy (EUR/kvarh)	
		contracted	peak time	Peak time	Partial peak time	Off-peak time	Super off-peak time	Supplied	Received
Global Use of the System	-	0,000	-	0,0082	0,0082	0,0082	0,0082	-	-
Transmission Use of Network - HV	-	-	1,653	0,0009	0,0008	0,0008	0,0007	-	-
HV Distribution Use of Network	-	0,084	0,126	0,0006	0,0005	0,0003	0,0003	0,015	0,0112
Commercial Network Management - HV	103,56	-	-	-	-	-	-	-	-
HV Grid Grid Access Tariff	103,56	0,084	1,779	0,0097	0,0095	0,0093	0,0092	0,015	0,0112

Table 3-3 - Prices for grid use by SpLV customers, January to August 2007

Special LV ACCESS TARIFF PRICES									
Tariff	Fixed term (EUR/month)	Power (EUR/kW.month)		Active energy (EUR/kWh)				Reactive energy (EUR/kvarh)	
		contracted	peak time	Peak time	Partial peak time	Off-peak time	Super off-peak time	Supplied	Received
Global Use of the System	-	0,000	-	0,0184	0,0181	0,0177		-	-
Transmission Use of Network - HV	-	-	1,855	0,001	0,0009	0,0008		-	-
HV Distribution Use of Network	-	-	0,236	0,0007	0,0006	0,0003		-	-
MV Distribution Use of Network	-	-	3,57	0,0021	0,0018	0,0009		-	-
LV Distribution Use of Network	-	0,635	5,716	0,003	0,0026	0,0016		0,0191	0,0146
Commercial Network Management - SpLV	27,89	-	-	-	-	-	-	-	-
Special LV Grid Access Tariff	27,89	0,635	11,377	0,0252	0,024	0,0213		0,0191	0,0146

Table 3-4 - Prices for grid use in two-rate time-of-day by StLV customers < 20.7kVA and > 2.3kVA, January to August 2007

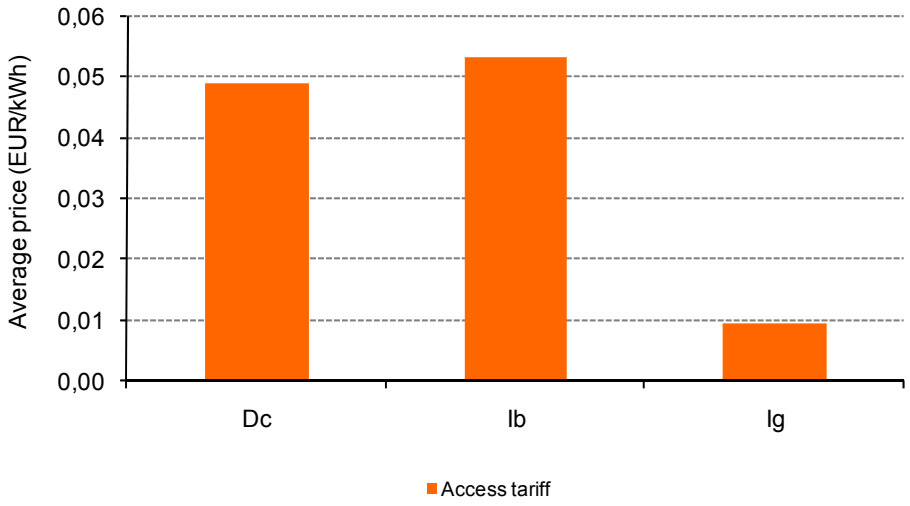
Standard LV <=20,7kVA TWO-RATE TIME-OF-DAY ACCESS TARIFF PRICES									
Tariff	Fixed term (EUR/month)	Power (EUR/kW.month)		Active energy (EUR/kWh)				Reactive energy (EUR/kvarh)	
		contracted	peak time	Peak time	Partial peak time	Off-peak time	Super off-peak time	Supplied	Received
Global Use of the System	-	0,000	-	0,0182		0,0177		-	-
Transmission Use of Network - HV	-	-	-	0,0073		0,0008		-	-
HV Distribution Use of Network	-	-	-	0,0014		0,0003		-	-
MV Distribution Use of Network	-	-	-	0,0142		0,0009		-	-
LV Distribution Use of Network	-	0,635	-	0,0224		0,0016		-	-
Commercial Network Management - StLV	1,58	-	-	-		-		-	-
Standard LV <=20,7 kVA two-rate Grid Access Tariff	1,58	0,635	-	0,0635		0,0213		-	-

Figure 3-4 shows the average prices paid by Dc, Ib and Ig-type consumers for grid access. These average prices are determined by applying the tariffs shown in the tables above to the consumption profiles established for the Dc, Ib and Ig-type consumers, as shown in Table 3-5. The values indicated do not include Value Added Tax (VAT) at the legal rate currently in force, 5%.

Table 3-5 - Characterisation of Dc, Ib and Ig-type consumers in 2007

Consumer-types	Contracted power (kW)	Annual consumption (kWh)	Annual consumption in off-peak time (kWh)	Use of contracted power (hours)
Dc	4,6	3.500	1.300	761
Ib	50	50.000	0	1.000
Ig	4.000	24.000.000	11.040.000	6.000

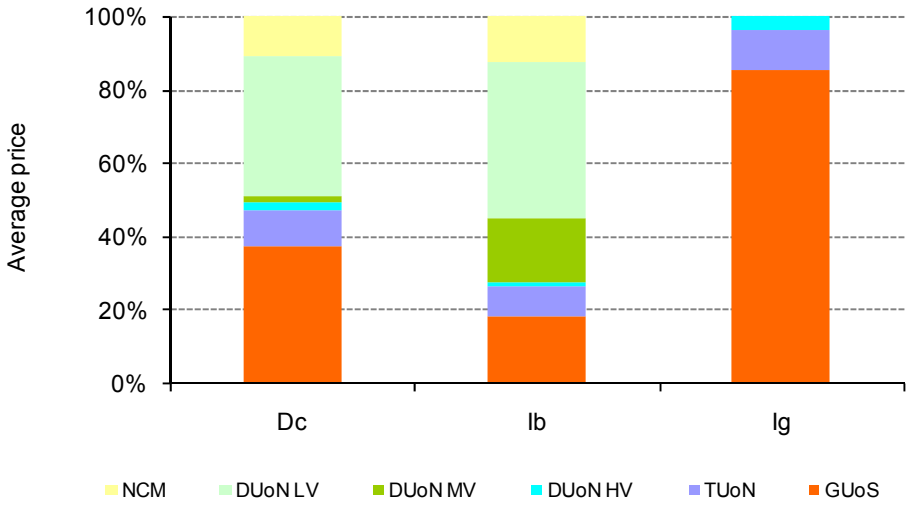
Figure 3-4 - Average prices paid by Dc, Ib and Ig-type customers for grid access, January to August 2007



For Figure 3-4, one should note that Ib-type consumers, although using a contracted power that is higher than Dc-type consumers, pay a higher average price than the latter for their grid access. This situation is due to the fact that Ib-type consumers, contrary to Dc-type consumers, do not use electricity in off-peak hours, resulting in a higher average price for the former.

Figure 3-5 and Figure 3-6 present the structure of the average prices paid by Dc, Ib and Ig-type customers for grid access from January to August 2007. Figure 3-5 shows the breakdown of the average price paid by each customer type in terms of the activity tariffs that make up their grid access tariff. In Figure 3-6 this breakdown is extended to the type of cost.

Figure 3-5 - Structure of the average prices paid by Dc, Ib and Ig-type customers for grid access, January to August 2007



Legend: GUoS – Global Use of System, TUoN – Transmission Use of Network, DUoN (HV) – Distribution Use of Network (High Voltage), DUoN (MV) – Distribution Use of Network (Medium Voltage), DUoN (LV) – Distribution Use of Network (Low Voltage), NCM – Network Commercial Management

Figure 3-6 - Breakdown of the average price paid by Dc, Ib and Ig-type customers for grid access, January to August 2007

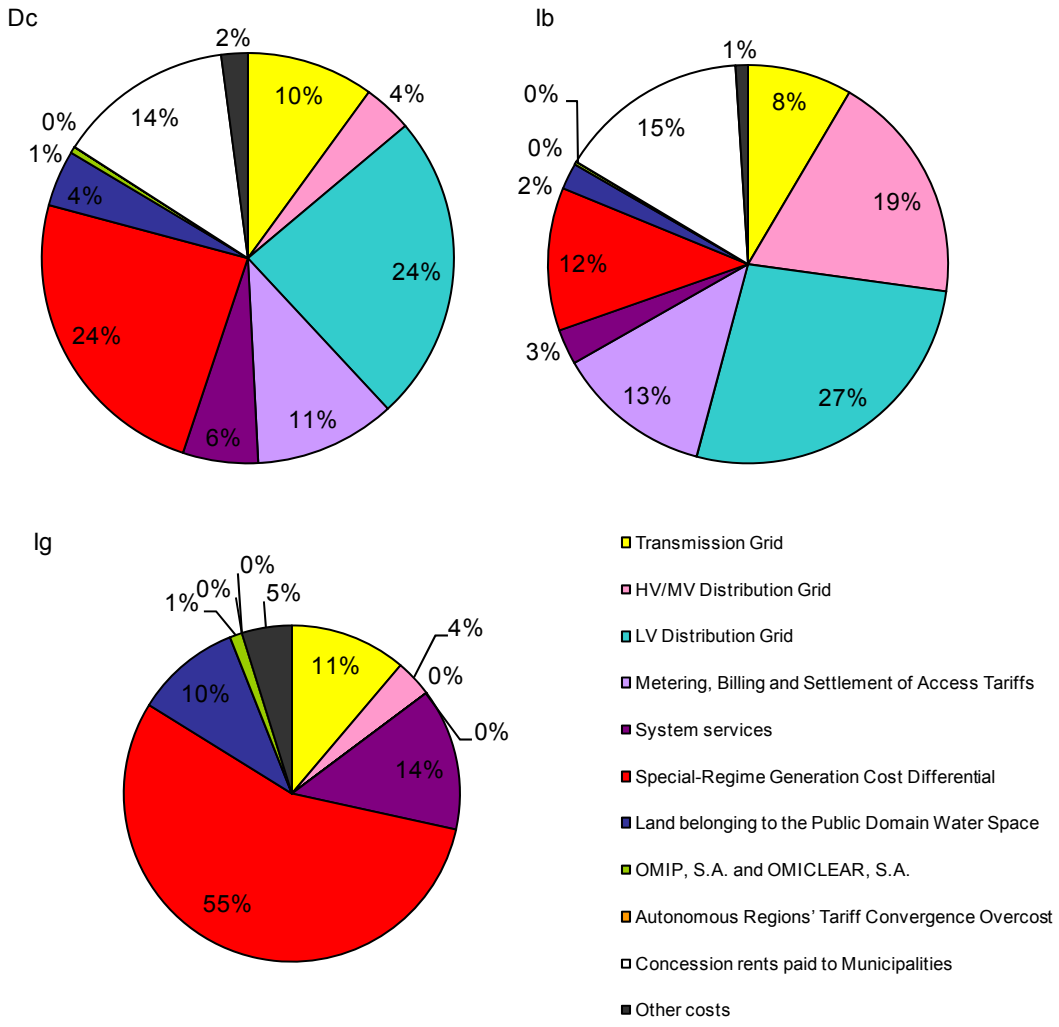


Table 3-6 summarises the average prices presented in Figure 3-5 and Figure 3-6.

Table 3-6 - Average prices of Grid Access tariffs, January to August 2007

Unit: €/kWh

Tariff	Consumer-type		
	Dc	Ib	Ig
Global Use of the System (GUoS)	0,0180	0,0094	0,0082
Transmission Use of Network (TUoN)	0,0049	0,0045	0,0011
HV Distribution Use of Network (DUoN HV)	0,0010	0,0006	0,0003
MV Distribution Use of Network (DUoN MV)	0,0009	0,0093	0,0000
LV Distribution Use of Network (DUoN LV)	0,0185	0,0225	0,0000
Network Commercial Management (NCM)	0,0054	0,0067	0,0000
Grid Access Tariff (VAT excluded)	0,0487	0,0531	0,0096
Grid Access Tariff (VAT included)	0,0512	0,0557	0,0101

Use of electricity is subject to a VAT rate of 5%.

Following the approval of Decree-Law no. 264/2007, as already mentioned, ERSE published new tariffs for sale to end users and access to grids for the September - December 2007 period. The context of this tariff revision is dealt with in section 3.2.2.

The table below presents the difference in the grid access tariff in effect from 1 September 2007 and those approved in December 2006.

Table 3-7 - Change in grid access tariffs as of September 2007, mainland Portugal

	Variation Set07/Jan07
Access Tariffs	**10,6%**
VHV Access	17,8%
HV Access	14,0%
MV Access	7,9%
SpLV Access	6,3%
StLV Access	11,5%

INFORMATION PROVIDED BY SYSTEM OPERATORS ON TARIFFS AND GRID CONNECTIONS

The legislation and regulations on the electricity sector impose upon the transmission and distribution system operators a wide range of duties of information to the consumers and market agents. The duties

of informing the system users are established in the Commercial Relations, Tariff, Access to Grids and Interconnections and Quality of Service Regulations and in the system use contracts.

The system operators are obliged to inform all interested parties about the regulated tariffs and prices they practise. They also have the duty to inform and advise on the best options available.

As regards the disclosure of information on tariffs, one must also highlight the role of ERSE and the suppliers. ERSE publishes complete information on the tariffs and produces information leaflets aimed at informing consumers of tariff prices and helping them to understand them. Additionally, it provides information tools (simulators) on its webpage to help customers choose the best tariff option, taking the consumption characteristics of their electrical installations into account.

The suppliers likewise play an important role in informing consumers about tariffs, in particular the system use tariffs. It should again be borne in mind that Portuguese customers prefer to have direct relations with their supplier. The customer – system operator relationship arises solely for purposes of requests for grid connection, technical assistance (faults) and communicating meter readings. In their bills, suppliers distinguish the amount corresponding to system use.

The regulations state that the system operator must inform and advise the grid connection applicant, namely as regards the voltage level appropriate for the connection, in order to secure the best technical and economic conditions – considering all aspects involving the connection application. This mandatory duty to inform involves the preparation and publication of information leaflets on the procedure required to make connections to the grid, as well as the mandatory submission of an estimate for the requested connection. The estimate for the connection charges must contain, amongst other things, the following information:

- Identification of the connection elements required, with indication of the respective technical features and design basis.
- Identification of the grid connection point.
- Type, quantity and cost of the main materials, equipment and manpower used for the connection.
- Terms of payment.
- A date by which the connection will be established and period for which the estimate is valid.

The terms of payment of grid connection charges, and the respective deadlines, are established in the Commercial Relations Regulations approved by ERSE.

3.1.2.2 CONTINUITY OF SUPPLY

Both the Tariff Regulations and Quality of Service Regulations contain provisions for regulating continuity of supply in mainland Portugal.

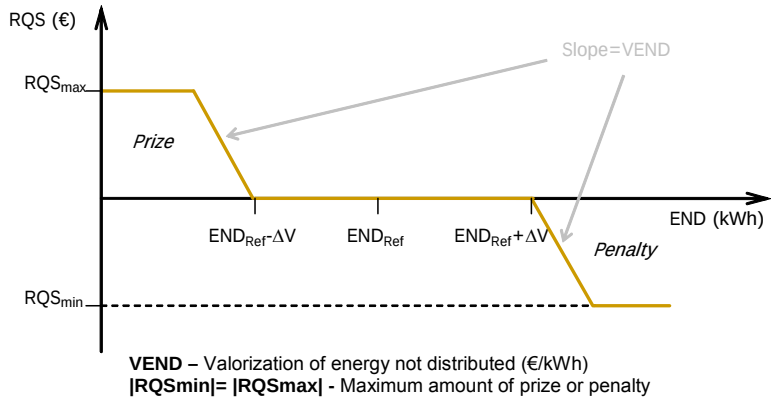
As regards the quality of service of electricity supply in the Autonomous Regions, the respective regulations applicable to Madeira and the Azores were published in 2004.

INCENTIVE FOR IMPROVING CONTINUITY OF SUPPLY

The Tariff Regulations, drawn up and approved by ERSE, provide for an incentive to continuity of supply, the effect of which is reflected in the income allowed for the MV and HV distribution network operator.

The value of the incentive to continuity of supply in the MV network in mainland Portugal established in the Tariff Regulations depends on the value of energy not distributed annually and is determined through the mechanism depicted in Figure 3-7.

Figure 3-7 - Continuity of supply incentive mechanism



Considering the information available at this date, we anticipate that the value of energy not distributed in 2007 is close to END_{Ref}-ΔV. This means that the quality of service incentive may either be nil or amount to a premium due to the quality of service delivered in 2007, to be reflected in 2009.

CONTINUITY OF SUPPLY IN 2007

There were no alterations in the Quality of Service regulations from 2006 to 2007.

The following is a characterisation of transmission and distribution networks in terms of continuity of supply, using three indicators for each network (transmission and distribution) determined for 2007:

- EIT - Equivalent Interruption Time: an indicator that applies to the transmission network. It determines the system's interruption time on the basis of the average expectable annual capacity (P_{me})

$$EIT = \frac{Energy\ not\ supplied}{P_{me}}$$

where:

$$P_{me} = \frac{Energy\ not\ supplied}{Energy\ not\ supplied + Supplied\ energy} \times number\ of\ minutes\ in\ a\ year$$

- TIEPI – Interruption Time Equivalent to Installed Capacity: an indicator applicable to the MV distribution network. It gives an indication of the duration of the interruption of the capacity installed in transformer stations.

$$TIEPI = \frac{Sum\ of\ the\ products\ of\ the\ installed\ capacity\ affected\ by\ the\ duration\ of\ each\ interruption}{Totality\ of\ installed\ capacity}$$

- SAIDI – System Average Interruption Duration Index: an indicator that applies to the transmission and distribution networks.

$$SAIDI = \frac{Sum\ of\ the\ interruption\ times\ at\ all\ delivery\ points}{Total\ number\ of\ delivery\ points}$$

- SAIFI – **S**ystem **A**verage **I**nterruption **F**requency **I**ndex: an indicator that applies to the transmission and distribution networks.

$$SAIFI = \frac{Sum\ of\ the\ number\ of\ interruptions\ at\ all\ delivery\ points}{Total\ number\ of\ delivery\ points}$$

The delivery points are the points where electricity is delivered to the customer's electrical installation or to another network.

Table 3-8 shows the continuity of supply indicators for mainland Portugal in 2007. The transmission network indicators are determined on the basis of all interruptions at the delivery points (DPs) and the distribution network indicators take all interruptions in excess of 3 minutes into consideration.

Table 3-8 - Continuity of supply indicators for mainland Portugal, 2007

Voltage level	Continuity of service indicator	Planned interruptions	Unplanned interruptions
Transmission	TIE (min)	-	0,87
	SAIFI	-	0,19
	SAIDI (min)	-	0,94
MV Distribution	TIEPI (min)	3,82	104,47
	SAIFI	0,04	3,02
	SAIDI (min)	6,86	162,22
LV Distribution	SAIFI	0,04	2,62
	SAIDI (min)	7,31	136,00

Source: REN, EDP Distribuição

Although provisions have been made for payment of compensation to customers for non-compliance with individual continuity standards, the respective information for 2007 has not yet been made available by the distribution network operator

Table 3-9 and Table 3-10 show the continuity of supply indicators for the Autonomous Region of the Azores. Interruptions in excess of 3 minutes were taken into consideration in determining the indicators. Table 3-10 presents information on specific islands in the Azores, in which electricity is exclusively transmitted through the distribution network.

Table 3-9 - Continuity of supply indicators of islands in the Autonomous Region of the Azores by transmission and distribution network, 2007

Island	Voltage level	Continuity of service indicator	Planned interruptions	Unplanned interruptions
São Miguel	Transmission	TIE (min)		0,006
		SAIFI		0,13
		SAIDI (min)		0,56
	MV Distribution	TIEPI (min)	135,25	161,95
		SAIFI	n.a.	n.a.
		SAIDI (min)	n.a.	n.a.
	LV Distribution	SAIFI	n.a.	n.a.
		SAIDI (min)	n.a.	n.a.
Terceira	Transmission	TIE (min)		2,05
		SAIFI		2,6
		SAIDI (min)		3,2
	MV Distribution	TIEPI (min)	373,47	445,32
		SAIFI	n.a.	n.a.
		SAIDI (min)	n.a.	n.a.
	LV Distribution	SAIFI	n.a.	n.a.
		SAIDI (min)	n.a.	n.a.
Pico	Transmission	TIE (min)		7,66
		SAIFI		6,5
		SAIDI (min)		13,36
	MV Distribution	TIEPI (min)	188,95	138,75
		SAIFI	4,2	14,0
		SAIDI (min)	234,70	713,18
	LV Distribution	SAIFI	4,1	12,5
		SAIDI (min)	191,1	646,9

Note: Provisional data.

Source: EDA

Table 3-10 - Continuity of supply indicators for islands in the Autonomous Region of the Azores with distribution networks only, 2007

Island	Voltage level	Continuity of service indicator	Planned interruptions	Unplanned interruptions
Santa Maria	MV Distribution	TIEPI (min)	167,73	109,78
		SAIFI	3,6	4,5
		SAIDI (min)	216,78	100,02
	LV Distribution	SAIFI	3,5	4,4
		SAIDI (h)	172,0	102,6
Graciosa	MV Distribution	TIEPI (min)	367,93	131,77
		SAIFI	3,6	10,8
		SAIDI (min)	288,14	247,17
	LV Distribution	SAIFI	2,6	9,5
		SAIDI (min)	200,90	222,20
São Jorge	MV Distribution	TIEPI (min)	360,63	27,73
		SAIFI	9,2	14,5
		SAIDI (min)	534,84	519,87
	LV Distribution	SAIFI	8,2	13,6
		SAIDI (min)	475,1	587,0
Faial	MV Distribution	TIEPI (min)	256,65	627,10
		SAIFI	n.a.	n.a.
		SAIDI (min)	n.a.	n.a.
	LV Distribution	SAIFI	n.a.	n.a.
		SAIDI (min)	n.a.	n.a.
Flores	MV Distribution	TIEPI (min)	149,40	172,95
		SAIFI	0,6	5,7
		SAIDI (min)	229,72	473,84
	LV Distribution	SAIFI	2,4	7,0
		SAIDI (min)	140,00	337,10

Note: Provisional data.

Source: EDA

In 2007 there were 2,326 situations of non-compliance with individual continuity of supply standards, which makes up approximately 2% of EDA customers.

Table 3-11 shows the continuity of supply indicators for the islands of the Autonomous Region of Madeira. Interruptions in excess of 3 minutes were taken into consideration in determining the indicators.

Table 3-11 - Continuity of supply indicators for the islands in the Autonomous Region of Madeira, 2007

Island	Voltage level	Continuity of service indicator	Planned interruptions	Unplanned interruptions
Madeira	Transmission	TIE (min)	14,38	23,33
		SAIFI	0,56	2,60
		SAIDI (min)	32,00	88,40
	MV Distribution	TIEPI (min)	43,27	69,01
		SAIFI	0,67	3,54
		SAIDI (min)	58,55	91,45
	LV Distribution	SAIFI	1,71	6,69
		SAIDI (min)	126,60	150,00
Porto Santo	Transmission	TIE (min)	7,22	59,38
		SAIFI	1,50	4,25
		SAIDI (min)	12,75	72,00
	MV Distribution	TIEPI (min)	38,47	79,96
		SAIFI	1,07	4,33
		SAIDI (min)	43,54	79,32
	LV Distribution	SAIFI	4,58	2,11
		SAIDI (min)	250,80	24,00

Source: EEM

In 2007 non-compliance of the individual continuity of service standards associated with the total duration of customer interruptions were registered for six customer installations in the Autonomous Region of Madeira (three LV installations and three MV installations).

3.1.2.3 CONNECTION TO GRIDS

Electricity system operators, within their respective catchment areas, must connect to their grids the electrical installations of customers who request such connection, as long as the technical and legal requirements are met.

The Commercial Relations Regulations define two types of connectors for MV and LV installations:

- Connectors for exclusive use – physical infrastructure for the exclusive transmission of electricity generated or used at a given electrical energy use installation. ERSE helps define the exclusive-use connectors, by approving their maximum length based on proposals submitted by system operators. The maximum lengths, which vary depending on voltage level, were approved in the first half of 2007 (30 metres for LV connections; 250 metres for MV connections).
- Connectors for shared use – physical infrastructure enabling the connection to the grid of more than one installation using electrical energy.

The Commercial Relations Regulations define the type of charges that must be paid by applicants to grid connections, establishing the guiding principles governing the sharing of such charges – as well as the modes of payment and possible payment in instalments.

Charges for connection to the grid or increase in contracted power for HV or VHV installations are subject to agreement between the applicant and the system operator in question.

For MV and LV the charges involved in constructing the exclusive-use connectors are entirely borne by the grid connection applicants, up to the limit chargeable for the length in question, as approved by ERSE.

The costs for connectors or shared connections in MV and LV are calculated on the basis of a price approved by ERSE (1st half of 2007), which depends on the distance and contracted power requested. These amounts are approved by ERSE and depend upon the grid type (airborne or underground) and voltage level.

Operators of electricity transmission and distribution networks should demand cost-sharing in immediate or deferred actions required to reinforce the grid, following a request for connection or increased power. The cost sharing depends on the power capacity requested and the respective parameters were published in the 1st half of 2007.

The regulations currently in force have endeavoured to establish economic indicators regarding the location of the installation for which connection to the grid is requested, as well as the requested power, considering the characteristics of each individual application.

The regulations state that the system operator must inform and advise the grid connection applicant, namely as regards the voltage level appropriate for the connection, in order to secure the best technical and economic conditions – considering all aspects involving the connection application. This mandatory duty to inform involves the preparation and publication of information leaflets on the procedure required to make connections to the grid, as well as the mandatory submission of an estimate for the requested connection.

Legislation currently governing the connection of power generators to the electricity transmission and distribution networks establishes that power generators are responsible for grid connection charges. Conditions regarding grid connection and the possible payment of charges due to grid reinforcement, as well as the payment conditions, are defined by agreement between the parties. Failing agreement between the generator and the system operator, ERSE must decide how costs related to grid connection should be shared, following the submittal of proposals by the entities concerned.

For special regime generators (renewable energy sources, waste and cogeneration plants), specific legislation directly establishes that the generation plant is connected to the receiving grid by means of a connection built at the initiative of the power generator. The charges involved in building the connection are borne by the generator if the connection is for its exclusive use. If a connection is used by more than one generator, charges relating to the construction of common sections are shared in proportion to the power contracted. Whenever a connection is used by a new special regime generator within its pay-back

period, generators that have borne the charges related to its construction receive compensation for the part that has not been paid back yet.

3.1.2.4 BALANCING

In the first half of 2007, before the launch of the MIBEL, the balancing mechanism used coincided with that used the previous year and described in the last Annual Report to the European Commission.

In the second half of 2007, the compensation service for electricity generation and consumption imbalances began operating in accordance with the secondary and tertiary regulated offer markets.

In its role as Technical System Manager, REN selects the offers submitted by the agents that represent the least total cost.

For each generation and consumption unit, and for each time period, the imbalance energy is calculated as the difference between the energy delivered or received and the energy of the corresponding contracting programme.

In each time period, the account adjustment mechanism takes two types of imbalance into account for each scheduling unit: imbalances by excess and imbalances by default.

Table 3-12 shows the causes of each type of deviation in accordance with the function associated with each scheduling unit.

Table 3-12 - Types of imbalance, by function

Function	Cause per type of imbalance	
	Excess	**Default**
Consumers that are market argents or purchase for pumping	Consumption less than the hourly purchasing programme	Consumption more than the hourly purchasing programme
Generators or Commercial Agents	Emissions higher than the hourly sales programme	Emissions lower than the hourly sales programme
Suppliers	Sum of the consumption by customers and hourly sales programmes less than the sum of the hourly purchase programmes	Sum of the consumption by customers and hourly sales programmes more than the sum of the hourly purchase programmes

Function	Cause per type of imbalance	
	Excess	Default
Last resort supplier	Market consumption (customer consumption minus the energy purchased directly from special regime generators) less than the hourly purchasing programme	Market consumption (customer consumption minus the energy purchased directly from special regime generators) higher than the hourly purchasing programme

Using the current methodology, the valuation of the imbalances in each hour corresponds exactly to the variable regulation costs to be paid to the agents that solve the imbalance by their participation in the regulated markets.

In the second half of the year, the imbalances were aggregated for each balance area, in accordance with the three areas that existed at the time.

Figure 3-8 shows the development in imbalance energies throughout 2007. It represents both imbalances by default and imbalances by excess.

Figure 3-8 - Development in imbalances (2007)

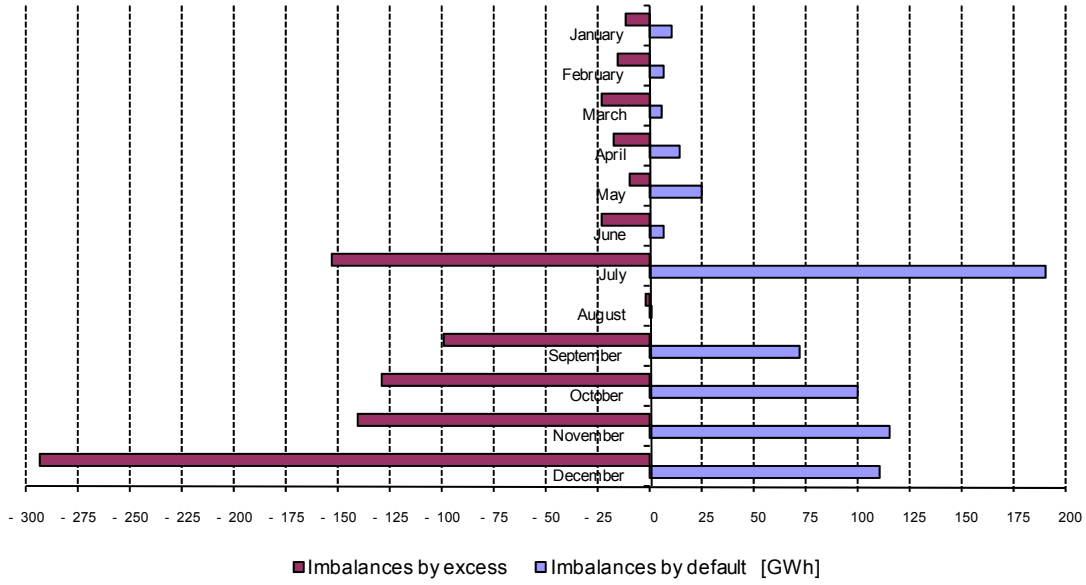


Table 3-13 shows the total annual value of imbalance energies by excess and default, as well as their respective valuation. One should note that, in the first half of the year, the imbalances were still valued by

means of indexation to the regulated energy and power tariff price, whereas, in the second half, valuation of imbalances resulted directly from the mobilised regulation energy costs effectively ascertained. The imbalance per unit rose to an average annual value of EUR 43.67/MWh and EUR 54.91/MWh respectively for imbalances by excess and by default.

Table 3-13 - Total annual imbalances and unit values (2007)

	Unit	Value
Imbalance by excess	MWh	916 930
Valuation of imbalances by excess	EUR	40 040 770,67
Imbalance by excess	€/MWh	43,67
Imbalance by default	MWh	658 951
Valuation of imbalances by default	EUR	36 180 670,99
Imbalance by default	€/MWh	54,91

3.1.3 SEPARATION OF SYSTEM OPERATORS

3.1.3.1 TRANSMISSION SYSTEM OPERATOR

ACTIVITY UNBUNDLING

The electricity transmission system operator in mainland Portugal (REN) is independent of all other activities carried out in the electricity sector, both legally and in terms of assets

In legal terms, REN is autonomous vis-à-vis the power generation and supply operators. Since 2007 it has been part of the REN, Redes Energéticas Nacionais; SGPS group, which holds 100% of its share capital. On the 31 December 2007, 51% of its share capital belonged to the Portuguese State (Parpública – Participações Públicas holding 31% and Caixa Geral de Depósitos 20%), 5% to EDP – Energias de Portugal, 5% to Gestmin, 5% to Logoenergia, 5% to Oliren, 5%to REE and 24% are free float.

The transmission system operator is responsible for carrying out the activities of electricity transmission and global management of the system. These duties include the settlement of accounts for transactions in the market.

The regulations currently in force in the electricity sector establish a set of rules designed to ensure compliance with the principles of safeguarding public interest, equality of treatment, non-discrimination and transparency in performance of the aforementioned functions.

In performing its functions, the transmission system operator distinguishes between the following activities:

- Electricity Transmission.
- Global System Management, which includes the functions of System Manager and Settlement of Accounts.

The above unbundling of activities and functions is ensured in terms of accounting and organisation.

The buying and selling of electricity in the context of the existing PPAs is a function performed by the Commercial Agent, which operates independently (i.e. being legally separated) vis-à-vis the activities of Electricity Transmission and Global System Management. This function is performed by a company established in 2007, REN Trading, which is part of the REN Group.

The list of potentially sensitive business information obtained while performing the above functions is approved by ERSE.

CODES OF CONDUCT

The Commercial Relations Regulations establish that those responsible for System Management and Account Settlement must be independent in relation to each other and independent of any other agents in performing their duties. These regulations further establish that the transmission system operator shall prepare Codes of Conduct for the entities responsible for performing the functions of System Operator and Settlement of Accounts, to secure the independence, impartiality, exemption and responsibility of their acts – namely those practised in the course of their relationship with generators, the distribution system operator in medium and low voltage, last resort suppliers, suppliers and customers

The regulations also establish that entities responsible for managing the Commercial Agent must be independent while carrying out their functions and responsibilities, as regards their relationship with the System Operator and Settlement of Accounts. This Code of Conduct must lay down the rules to be complied with by the Commercial Agent, as regards the independence, impartiality, exemption and responsibility of its acts – namely those carried out in the course of its relationship with the entity performing the functions of System Operator and Settlement of Accounts, the generators and the last resort suppliers.

The above Codes of Conduct correspond to the conformity programme established in article 10, paragraph 2 d) of Directive 2003/54/EC. Portuguese legislation does not yet provide for the existence of a person responsible for observation of compliance with each Code of Conduct, as established in said Directive. The Commercial Relations Regulations, however, state that mandatory internal audits shall be

carried out every year, with a view to checking that the principles and rules established by the Codes of Conduct are correctly enforced. The results of such audits are sent to ERSE.

ACCOUNTING UNBUNDLING

The Tariff Regulations issued by ERSE establish that all regulated companies must adopt accounting unbundling for each of the respective activities mentioned above, as if these were autonomous entities, so that balance sheets and profit and loss statements can be prepared for each of them. This information is submitted to ERSE on a yearly basis, both in terms of real figures and forecast figures for the next year. The real figures for each regulated activity must be subject to an audit and be accompanied by a respective report produced by an independent auditing company.

ERSE has issued standards as a complement to the Tariff Code, taking into consideration the kind of accounting information that must be made public by virtue of the tax laws. These standards specify and separate, by activity, the information that may be also divulged from other information, which, due to its confidentiality or breakdown level, should not be made public, as it is used by ERSE only for the purpose of calculating tariffs. In its annual document justifying the accounts for next year's tariffs, ERSE presents the information on real and forecast values deemed more important to the public concerned, while preserving the confidentiality of information that is potentially sensitive in commercial terms.

ERSE has the power to accept or refuse the figures sent by the companies for the purpose of calculating tariffs. Its practice is, whichever its decision, to always justify the figures taken into consideration.

Since it began its operations, ERSE has never found any serious case of refusal to voluntarily provide information, or the provision of defective information.

CORPORATE IMAGE OF THE TRANSMISSION SYSTEM OPERATOR

REN is independent, in legal terms and in terms of assets, of the other activities carried out in the electricity sector and uses its own logotype, which is distinct from those of other entities operating in the sector.

REN has its own website on the Internet (www.ren.pt) to provide information on activities assigned to the company.

MAIN PROBLEMS IDENTIFIED

Up until 1 July 2007 the activities of electricity transmission and the purchase of PPA-derived electricity were carried out by the same business group. Following the termination of the great majority of the PPAs,

this problem was somewhat mitigated, given that the two PPAs that remained in force were now managed by the REN Group company, REN Trading.

Nevertheless, in order to minimise the remaining disadvantages emerging from this situation, the regulations governing the electricity sector establish a number of principles, rules and procedures aimed at ensuring that the different activities are carried out independently of each other.

3.1.3.1.1 DISTRIBUTION SYSTEM OPERATORS

ACTIVITY UNBUNDLING

The main DSO (distribution system operator) is EDP Distribuição, the exclusive holder of distribution rights for medium and high voltage electricity in virtually the entire territory of mainland Portugal. Ten other small operators also provide low voltage distribution, ensuring electricity distribution to approximately 30,000 customers.

EDP Distribuição is a legally autonomous entity within the EDP Group. Its share capital is 100% held by EDP, S.A.. The EDP Group also owns electricity generation and supply companies.

Unbundling of the activities of system operation and last resort supply activity was carried out in accounting and organisational terms within EDP Distribuição until the end of 2006. By virtue of Decree-Law no. 29/2006, of 15 February 2006, which transposed Directive 2003/54/EC to Portuguese law, from 2007 onwards the last resort supplier licence was awarded to EDP Serviço Universal, SA (hereafter EDP Serviço Universal), ensuring legal separation as well. Nevertheless it is 100% owned by EDP Distribuição.

In the case of low voltage electricity distribution operators, which supply approximately 30,000 customers, the activity unbundling exists in accounting terms. Small low voltage electricity distribution operators also perform last resort supplier functions in geographical areas where they hold a distribution licence or a concession contract and they must ensure the supply of electricity to all consumers who may request it, applying the regulated tariffs and prices regime.

EDP Distribuição, in its capacity as distribution system operator, ensures the unbundling in accounting terms of the following activities:

- Electricity Distribution.
- Buying and Selling of Access to the Transmission Network.
- Commercial Network Management, including management of the supplier switching process.

In terms of accounting, activities are unbundled in accordance with the Tariff Regulations, as described above.

CODE OF CONDUCT

In accordance with the Commercial Relations Regulations, EDP Distribuição must prepare a Code of Conduct establishing the rules to be complied with by entities responsible for the activities of distribution operators, in order to secure the independence, impartiality, exemption and responsibility of their acts – namely those practised in the course of their relationship with the entities responsible for the transmission system operations, generators, last resort suppliers, suppliers and customers.

EDP Distribuição must contract an independent external auditor to check compliance with the Code of Conduct and the effectiveness of the implemented procedures and systems, so as to ensure the independence and impartiality of its performance vis-à-vis the remaining players.

ERSE approves the criteria for selecting the entities responsible for the auditing. The results of such audits, together with a report describing the action taken to ensure compliance with the Code of Conduct, must be sent to ERSE each year.

The small electricity distribution operators mentioned above do not have to ensure activity unbundling, or draw up Codes of Conduct.

CORPORATE IMAGE OF DISTRIBUTION DYSTEM OPERATORS AND EDP SERVIÇO UNIVERSAL

Due to the fact that they are both part of one and the same business group, the corporate images of EDP Distribuição and EDP Serviço Universal are the responsibility of that group (the EDP Group) and can be easily confused with the image of the group's holding company (for example, the logo is the same).

As regards the company website, information on EDP Distribuição can be found on www.edp.pt, the EDP Group website.

SHARED SERVICES

There is a standing relationship, in commercial and financial terms, between EDP Distribuição and other EDP Group companies, involving a large number of transactions. The main companies involved and the nature of the said transactions in 2007 are identified as follows.

Due to the ongoing consolidation of the MIBEL integration process, which, amongst other measures, was reflected in the obligation on the part of the last resort supplier to purchase electricity in the market, the EDP Distribuição actives related with infrastructure management and the supply of electricity were separated in legal and accounting terms, leading to the incorporation of EDP Serviço Universal (EDP SU), which brings the last resort supply activities under one roof. This EDP Group company has a very close relationship with the rest of the group as far as subcontracting business services is concerned.

As far as EDP Distribuição is concerned, the total amount of external supplies and services contracted from other EDP Group companies is 57%. In the case of EDP SU, the figure is 99% of all external services and supplies contracted All of these services and supplies are justified by commercial network management activities. In the former case, electricity distribution was the activity that contributed the most to that weight, with the services provided by EDP Group companies accounting for 35% of the total amount of EDP Distribuição's external services and supplies.

EDP Distribuição has presented, since 2003, a report drafted by an independent auditing firm, which certifies that said transactions with EDP Group companies are consistent with the Portuguese laws on transfer prices.

MAIN PROBLEMS IDENTIFIED

Another aspect that needs to be addressed is the corporate image of the distribution system operator, which is frequently associated with the corporate image of the EDP Group, which holds companies operating as electricity generators and suppliers. The use of the same logotype and the fact that the distribution system operator and last resort supplier do not have their own websites, independent of the EDP Group site, is a lack of clarity that negatively affects the image of impartiality and neutrality that is required of the distribution system operator and the last resort supplier.

3.1.3.2 AUTONOMOUS REGIONS OF THE AZORES AND MADEIRA

ACTIVITY UNBUNDLING

EDA and EEM are the companies responsible for purchasing, distribution and last resort supply of electricity, in the Autonomous Region of the Azores and in the Autonomous Region of Madeira respectively.

At the end of 2007 the Autonomous Region of the Azores was still the majority shareholder of EDA (with a 50.1% stake). ESA – Energia e Serviços dos Açores, SGPS, SA, held a stake representing 39.7% of the share capital. EDP-Gestão da produção de Energia, S.A., with a 10% stake, is the other large shareholder. The remaining 0.2% belong to small shareholders.

The total share capital of EEM belongs to the Regional Government of Madeira.

EDA and EEM carry out the following activities:

- Electricity Purchase and System Management.
- Electricity Distribution.
- Electricity Supply.

Decree-Law no. 29/2006, of the 15 February 2006, which established the basis for the organisation and functioning of electricity sectors, also applies to the Autonomous Regions of the Azores and Madeira. With two exceptions: provisions regarding the organised market provided for in this law, and the legal unbundling of the transmission, distribution and supply activities, the latter being the object of a derogation pursuant to Directive 2003/54/EC of the European Parliament and Council, dated 26 July 2003. The Autonomous Regions of the Azores and Madeira achieved said derogation through Commission Decisions no. 2004/920/EC of 20 December and no. 2006/375/EC of 23 May. Considering the terms of the aforementioned laws and decisions, the activities referred to above are subject only to separation in accounting terms, while observing the rules established in the Tariff Regulations already described above.

CORPORATE IMAGE OF SYSTEM OPERATORS

Both EDA and EEM have their own websites on the Internet, at www.eda.pt and www.eem.pt respectively.

3.2 COMPETITION

3.2.1 CHARACTERISATION OF THE WHOLESALE NATURAL GAS MARKET

In mainland Portugal, the structure of the supply of electricity in the wholesale market[9] in 2007 was indelibly marked by the launch of the organised market on 1 July for the majority of the electricity generators. From this date onwards, the standard regime generators[10] began offering their electricity for sale in the MIBEL daily market managed by OMEL.

This fact was an important transition, with the price formation being carried out in accordance with organised market rules as opposed to being determined by the long-term contract conditions (PPAs – Power Purchase Agreements) and by the principle of centralised control applying criteria of economic and physical maximisation of the system.

This regime transition was preceded by the termination of the PPAs and the entry into force of a mechanism to guarantee contractual conditions, known as the contractual balance maintenance

[9] Here wholesale market refers to electricity generated plus the international import flows aimed at meeting the consumption requirements in mainland Portugal.

[10] Standard regime generation generators are all those electricity generators not included under special regime generation, which groups generators using renewable sources, waste, hydroelectric generation up to a capacity of 10 MVA and cogeneration.

mechanism, the implementation costs of which (CBMCs – Contractual Balance Maintenance Costs) are shared by the whole system. Nevertheless, there remain two operators, corresponding to independent ordinary regime plants belonging to the incumbent, for which the PPAs were not terminated. Their market offers are operated by an entity created specifically for that purpose in the context of the business universe of the transmission system operator.

Thus, the wholesale supply of electricity in mainland Portugal from the beginning of the second half-year 2007 was based on the following types of generation:

- Standard regime generation included in the CBMC mechanism, for which the sales offers are placed in the organised market[11] or the electricity is sold via bilateral contracts.
- Standard regime generation not included in the CBMCs because their respective PPAs were not terminated, for which the sales offers are placed in the organised market or the electricity is sold via bilateral contracts by a managing entity that is independent of the power plant owner.
- Standard regime generation from the liberalised market for which the sales offers are placed in the organised market or via bilateral contracts.
- Special regime generation, for which there is a guarantee that the volumes generated will be purchased by the last resort supplier at a regulated price, whereby the respective cost must be divided up in the Global Use of the System tariff applied to all customers. Pursuant to the current legal framework, these generators do not participate in the organised market.

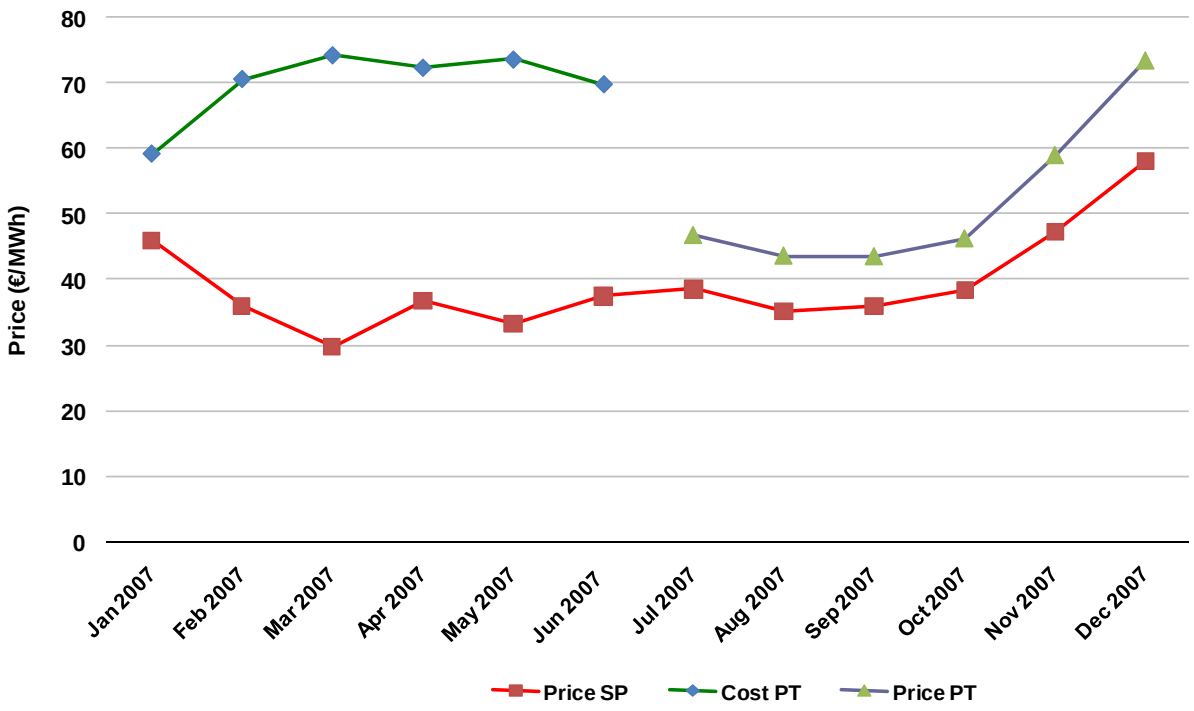
To these electricity generation segments one must add the power transmitted via the interconnection with Spain –the only interconnection in the Portuguese electricity system – for satisfaction of the national demand, from which one must subtract the export volume at the same interconnection point. The capacity available at the interconnection allows for the introduction of non-negligible competitive pressure on the Portuguese incumbent in the generation of electricity, given that it represents, on average, approximately 15% of the national consumption and, after subtracting the part of the supply corresponding to special regime generation, approximately 19% of the electricity purchased in the organised market.

Figure 3-9 compares the costs of purchasing electricity in Portugal (through the PPAs with the thermoelectric plants[12] up until the end of the first half of 2007) and the price formed in the daily market for Portugal (in the second half of 2007) to the price for Spain formed in the organised market.

[11] The creation of the Iberian Electricity Market (MIBEL) establishes an organised market made up of two contracting branches: one for spot transactions (located in Spain and which became valid for Portugal on 1 July 2007) and another for forward contracting (located in Portugal, which started operations in early July 2006).

[12] The unit costs for the group of thermal power plants are an approximation of the market cost, given that the hydroelectric plants are valued using the substitution technology and, consequently, the total cost will not be very far from the average obtained. However, one must consider that the costs methodology is comparative assessment of

Figure 3-9 - Cost and price of electricity in Portugal and price in Spain – 2007



Source: REN, OMEL, ERSE

In Portugal, the unit cost in the first half of 2007 was determined on the basis of the fixed and variable PPA charges and includes the variable adjustment cost for natural gas supply contracts. In the second half-year, in both Portugal and Spain, the energy unit cost is represented by the average monthly price in the market calculated on the basis of the final OMEL price. One should bear in mind that, in the context of the MIBEL, the daily market operates on the market splitting principle, which determines the formation of different princes for Portugal and Spain whenever energy transit capacity at the interconnection is used up. In a situation in which the final price for purchase and sales offers in the market does not determine the total congestion of the interconnection, a single price for the physical Iberian Peninsula space shall be valid.

The development in the unit costs of electricity generation in Portugal and the development in the market prices in Portugal (second half-year 2007) and Spain seems to point towards a greater convergence of electricity purchase costs in the two countries when both function in a market regime.

average costs, while the market price is marginalist and must reflect the marginal cost of the most expensive plant in the system in each price formation moment.

However, the existence of different average monthly prices for Portugal and Spain is also perceptible. This can be due to structural reasons, namely the make-up of the generation plant system and the reserve margin of each of the systems. One should also note that Portugal does not have installed capacity provided by nuclear power plants, which have lower marginal costs. This means that, in structural terms, Portugal has a generation mix with costs dependent on costs for the production of conventional thermal power generation.

MEETING NATIONAL CONSUMPTION REQUIREMENTS

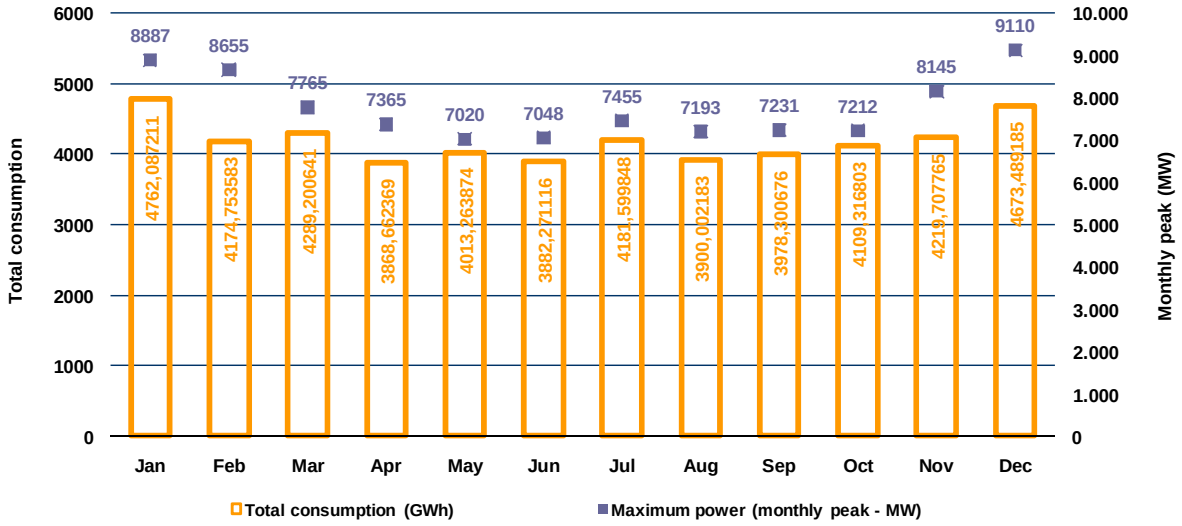
Assessment of total consumption in mainland Portugal, with a view to characterising the wholesale electricity market, takes into consideration deliveries to the system by standard regime generation and special regime generators, as well as the electricity import balance.

Total consumption[13] in 2007 amounted to 50.1 TWh, with the system reaching its highest peak of 9,100 MW on 18 December. The total installed capacity at the end of the year was 14,041 MW, to which one can add approximately 1,112 MW relating to the average capacity commercially available for import at the interconnection. By joining the values of installed capacity and average import capacity at the interconnection, we arrive at a degree of integration via the interconnection of approximately 8%. However, here one must bear in mind that approximately 25% of the installed capacity is derived from special regime generation, in particular wind generation, whose intermittence of generation does not guarantee the constant availability of values over time, so that, when one weighs in that factor, one arrives at a higher degree of integration.

Figure 3-10 shows the development in consumption referred to emission for 2007, broken down by month, as well as the development in the system's monthly peak for the same period.

[13] The national consumption referred to emission communicated by the system operator is considered for the purposes of characterising total consumption.

Figure 3-10 - Development in consumption referred to emission and the monthly peak in 2007, mainland Portugal



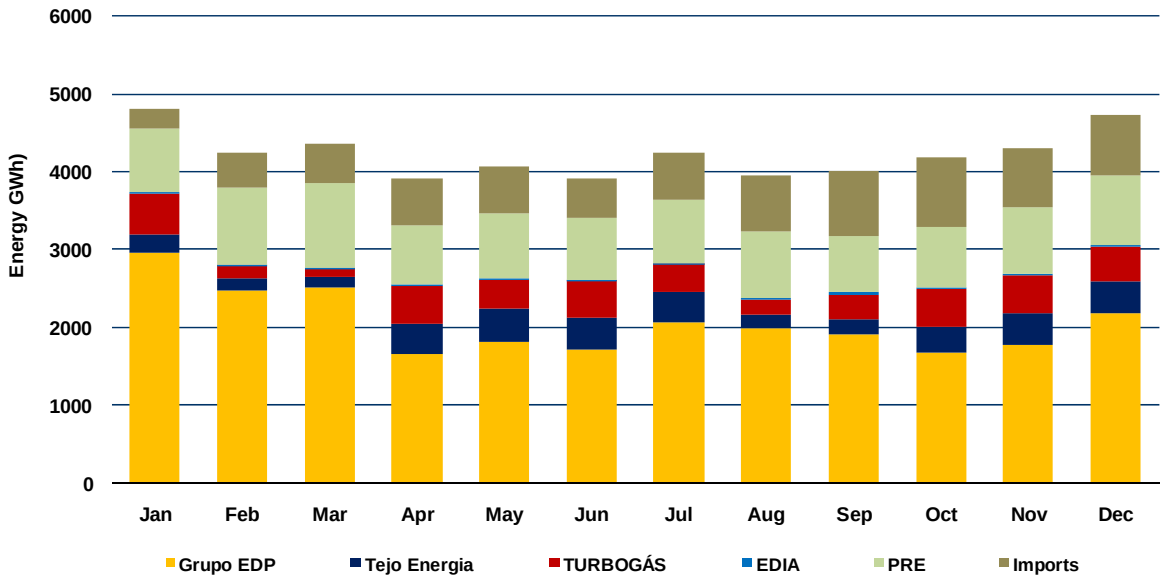
Source: REN

The contribution from different generators to meet annual consumption requirements is shown in Figure 3-11, in which generation units are aggregated by corporate group – except in the case of special regime generation and electricity imports, where aggregation is not possible. Moreover, the aggregated national consumption figures include the values for consumption for hydroelectric pumping.

Thus one can conclude from this table that electricity supply in Mainland Portugal is essentially secured by three main entities: EDP Group, Tejo Energia and TURBOGÁS. In the context of the regime change that took place halfway through the year, the latter two came to be operated, in terms of market operations, by a company created specifically for that purpose. This company is wholly owned by the holding company that also owns the transmission system operator, given that the respective PPAs were not terminated.

The EDP Group generates electricity with power plants that are included in the CBMC mechanism, as well as other plants, which, prior to 1 July, could be grouped under liberalised generation. Figure 3-11 shows the monthly development in the national consumption in 2007, and the origin of the energy required to cover the demand.

Figure 3-11 - National consumption and contribution to satisfying demand, 2007



Source: REN

The development throughout the year 2007 shows that the average contribution of EDP Group-owned generation to satisfying the national demand was approximately 49% for the year as a whole, whereby the contribution was larger in the first half of the year (52%) than in the second (45.6%). On the other hand, the contribution of imported energy to satisfying the national demand increased 11.5% in the first half to 18% in the second half of the year. This can be put down to the launch of the new market regime on 1 July 2007.

Table 3-14 shows the relative contribution from the different generators to satisfying national consumption requirements, which is an approximated calculation of the market shares of electricity generation. In this regard we again stress the limitations due to the absence of a breakdown of the electricity produced by entities operating in the special-regime market, as well as the fact that we cannot determine which share is attributable to Hidrocantábrico (EDP Group) in the import balance of electricity.

Table 3-14 - Relative contribution to satisfying national demand, mainland Portugal

Contribution to satisfying national demand - mainland Portugal												(GWh)
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
EDP Group	2.957,8	2.475,3	2.495,2	1.656,4	1.802,2	1.710,7	2.050,9	1.981,9	1.908,9	1.673,5	1.773,5	2.173,9
Tejo Energia	228,8	141,0	147,4	380,9	423,9	399,4	391,4	175,6	192,9	324,5	393,9	415,4
TURBOGÁS	525,8	176,8	106,5	490,2	381,3	486,6	367,6	189,9	314,6	488,6	485,5	440,5
EDIA	20,0	6,0	16,0	13,0	21,0	13,0	2,0	21,0	22,0	27,0	36,0	22,0
SRG	820,3	994,2	1.086,2	752,4	820,7	786,0	819,5	853,4	725,0	770,5	846,2	882,9
Imports	703,9	798,2	842,9	706,3	759,8	620,8	752,0	861,7	929,2	918,9	870,8	876,0
Exports	454,4	357,4	344,3	104,2	155,0	112,9	150,7	150,1	85,7	31,9	111,6	94,7
Interconnection balance	249,5	440,8	498,6	602,2	604,8	507,9	601,3	711,6	843,5	886,9	759,3	781,3
TOTAL (with pumping)	**4.802,3**	**4.234,2**	**4.349,8**	**3.895,1**	**4.054,0**	**3.903,5**	**4.232,8**	**3.933,5**	**4.006,8**	**4.171,0**	**4.294,4**	**4.716,1**

Source: REN; drawn up by ERSE

If we take the business structure that exists in Portugal into account and consider Tejo Energia and TURBOGÁS as independent operators, despite the fact that the respective power plants are being operated by the same entity since 1 July 2007, the number of companies that meet more than 5% of the national demand is 3, meaning that there was no change in relation to 2006 in this area. The same goes for the installed capacity criterion. Here one must bear in mind that the disaggregation of the installed capacity for special regime generation does not allow for the possible allocation of capacity to the standard regime generation operators.

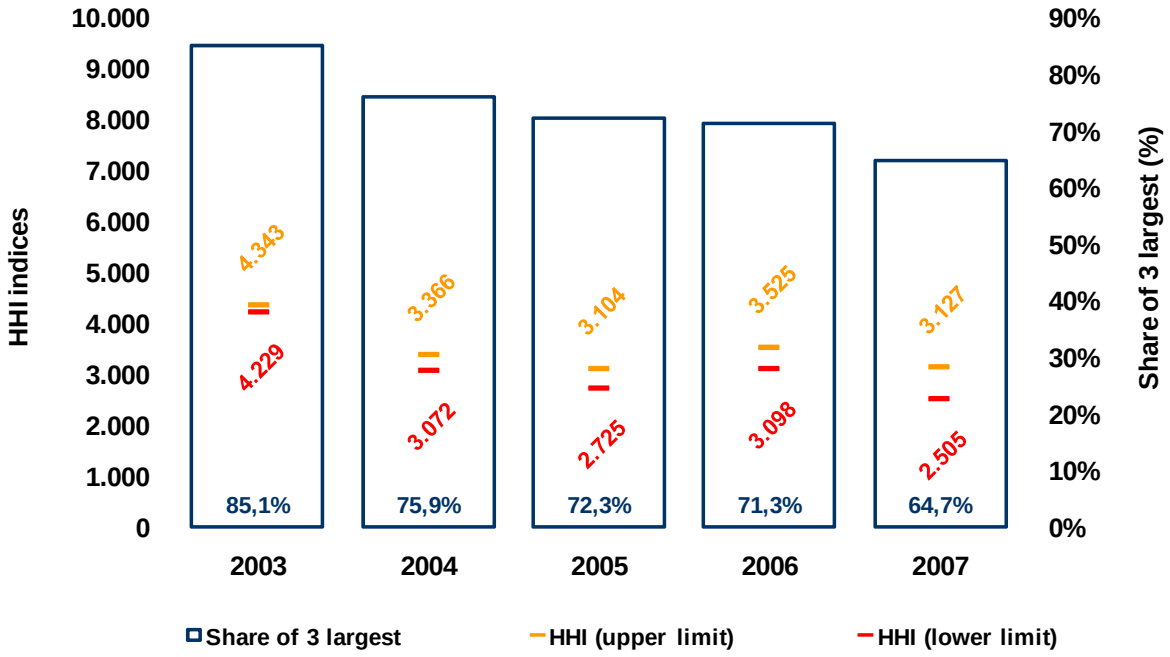
In terms of the aggregated figures for 2007, there was a decrease in generation by the EDP Group (from 27.1 TWh in 2006 to approximately 24.7 TWh in 2007) and by Tejo Energia (from 4.4 TWh to 3.6 TWh), while there was a growth in the generation figures for TURBOGÁS (from 4.1 TWh to 4.5 TWh) and special regime generation (from 8.8 TWh to 10.2 TWh).

The import balance value also increased in 2007, especially during the second quarter. The aggregated imported energy for the year was 7.5 TWh (as compared to 5.4 in 2006). Be that as it may, it should be noted that the calculations of electricity produced by the EDP Group did not consider the values produced by Hidrocantábrico, a company held by EDP in Spain, for which the possible values of electricity imported to mainland Portugal are included in the import balance and cannot be separated from other imports.

The development in 2007 in terms of the contribution to satisfying demand in mainland Portugal highlights another central development, as compared to 2006: the significant increases in special regime generation and, above all, in imports, leading to a reduction in the EDP Group share.

Further with regard to the analysis of concentration in the sector in terms of contribution to satisfying total consumption requirements, Figure 3-12 shows the values resulting from calculations based on the Herfindhal (HHI) indices, as well as the joint share of the three largest operators.

Figure 3-12 - Concentration indicators in the relative contribution to satisfying national demand in mainland Portugal



In order to identify the joint share of the three largest operators, we considered the values of each individual entity rather than compound values for special regime Generation or imports – since these cannot be specified by entity[14].

On the other hand, in calculating the Herfindhal indices we considered their upper and lower limits, which result respectively from the fact that (i) Imports and special regime Generation represent a maximum dispersion of those shares, and (ii) those values concern one single entity.

Thus, Figure 3-12 confirms that the relative share of the three largest generators has been dropping since 2003, although the HHI index shows a somewhat more irregular trend. The development in the concentration indicators in 2007 taken into consideration here show a reduction in concentration of the supply of electricity in mainland Portugal as compared to previous years and, in particular, to 2006. This situation can be largely explained by the reduction in the largest operator's share and the increase in the contribution by imported energy and special regime generation in satisfying national demand. By exposing the Portuguese incumbent to greater competition, albeit limited by the interconnection capacity,

[14] For the year 2007, the shares of the EDP Group, TURBOGÁS and Tejo Energia were added together, even though special regime generation as a whole and the import balance figures are greater than the TURBOGÁS and Tejo Energia figures.

the launch of the organised market in the second half of 2007 may have played a central role in reducing the aforementioned degree of concentration.

The development in installed capacity in 2007 (presented in section 5.1.1) allowed for a reduction in the concentration indicators in terms of installed capacity as compared to 2006, both at the level of the share of the three largest operators (72.5% in 2007 compared to 75% in 2006) and at the level of the HHI figures (the lower HHI limit went from 4,063 in 2006 to 3,806 in 2007, while the upper limit went from 4,608 to 4,472).

3.2.2 CHARACTERISATION OF THE RETAIL MARKET

In mainland Portugal the retail market is based on the co-existence of a regulated system of integral tariffs practised by last resort suppliers and a market-driven system in which energy is freely contracted. As grid access tariffs are paid by all consumers or by the suppliers on their behalf, they are naturally incorporated in both the End User Tariffs practised by last resort suppliers and the tariffs freely practised by market suppliers. In End User Tariffs regulated by ERSE, grid access tariffs are directly incorporated through their calculation method – as the said End-User Tariffs are determined by adding the Grid Access tariffs to the Energy Tariff and the Supply Tariff practised by the last resort supplier.

CHARACTERISATION OF ELECTRICITY DEMAND

Erro! A origem da referência não foi encontrada. characterises electricity demand in mainland Portugal, presenting the consumption and the number of customers by type of supply. The table shows forecast values for 2007 (i.e., values on the basis of which the 2007 tariffs were determined).

Table 3-15 - Characterisation of demand by type of supply, 2007

Type of supply	Energy (GWh)	Number of Customers
VHV	**1.393**	**23**
HV	**6.309**	**194**
MV	**14.360**	**22.492**
LV	**24.782**	**6.020.688**
SpLV	3.441	30.615
StLV (PL excluded)	19.910	5.942.273
PL	1.431	47.800
Total	**46.844**	**6.043.397**

Table 3-16 gives a breakdown of both consumption and customers into VHV, HV, MV and LV, for non-household supplies, by category of electricity consumption.

Table 3-16 - Breakdown of non-household VHV, HV, MV and LV consumption and customers by consumption category

EUROSTAT		Standard customer (MWh)		% customer	% Consumption
Customer-type	Annual consumption (MWh)	Lower limit	Upper limit		
-	-	0	25	90,53	14,00
Ia	30	25	40	2,87	3,87
Ib	50	40	75	3,47	6,23
Ic	160	75	300	2,28	12,81
Id	1 250	300	1 500	0,68	17,33
Ie	2 000	1 500	6 000	0,15	16,73
If	10 000	6 000	16 000	0,02	8,06
Ig	24 000	16 000	35 000	0,01	5,17
Ih	50 000	35 000	70 000	0,00	4,20
Ii	70 000	70 000	100 000	0,00	1,71
-	-	> 100 000		0,00	9,89
		Total		100,00	100,00

Table 3-17 gives a breakdown of StLV household consumption and customers, by category of electricity consumption.

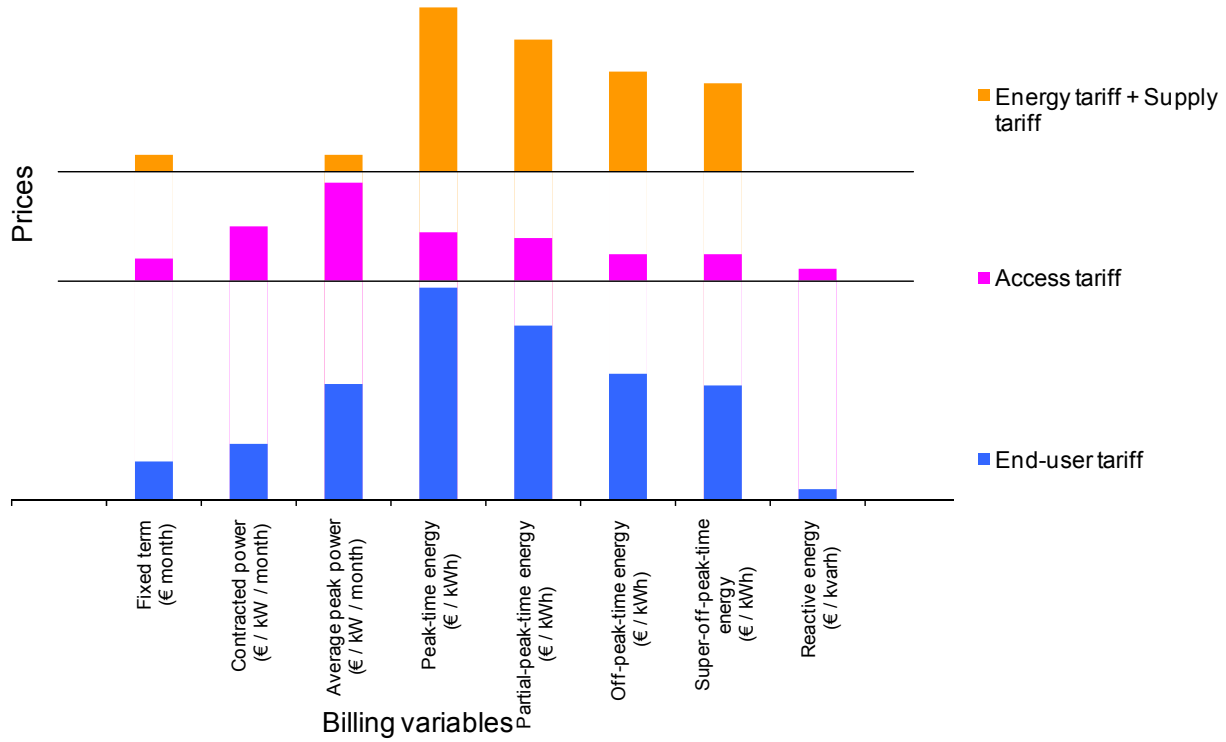
Table 3-17 - Breakdown of StLV household consumption and customers, by consumption category

EUROSTAT		Standard customer (MWh)		% customer	% Consumption
Customer-type	Annual consumption (MWh)	Lower limit	Upper limit		
Da	600	0	1 000	28,5	8,6
Db	1 200	1 000	2 000	23,9	13,2
Dc	3 500	2 000	5 000	37,7	46,6
Dd	7 500	5 000	10 000	8,3	21,7
De	20 000	10 000	30 000	1,4	8,1
-	-	> 30 000		0,1	1,9
		Total		100	100

BREAKDOWN OF THE END-USER PRICE PRACTISED BY LAST RESORT SUPPLIERS

As mentioned above, the End User Tariffs practised by last resort suppliers result from the addition of Grid Access tariffs to the Energy Tariff and the Supply Tariffs practised by the last resort supplier. Figure 3-13 shows the tariff additivity method used to determine the End User Tariffs.

Figure 3-13 - Tariff additivity method used for calculating the End User tariffs



This method of determining the tariffs applicable by the last resort supplier makes it possible to prevent cross-subsidisation between:

- Monopoly activities (i.e. grid activities) and market activities (supply and sale of electricity).
- Customers of the last resort supplier with different consumption profiles.
- Customers of the last resort supplier and market-driven customers.
- Last resort suppliers and market suppliers.

On the one hand, to the extent that the tariffs that make up the sum are based on marginal costs in terms of structure and, on the other, on the total costs in terms of level, cross subsidisation is avoided, leading to efficient allocation of resources.

This tariff calculation methodology allows for a detailed knowledge of all tariff components by activity or service. In particular, this breakdown of information on electricity bills, which is provided for in the current regulations on the electricity sector, specifies the prices paid for grid access, energy and supply, which may be freely negotiated in the market. This makes it easier for customers to choose their supplier. The possibility of having an even more detailed breakdown of electricity bills by type of cost or activity, is also provided for, as follows:

- As regards grid activities:

- Global Use of System Tariff.
- Transmission Use of Network Tariff.
- Distribution Use of Network (HV and MV) Tariff.
- Distribution Use of Network (LV) Tariff.
- Commercial Network Management Tariff.

- As regards last resort supplier activities:
  - Energy Tariff.
  - Supply Tariff.

ELECTRICITY END USER SELLING PRICE

Decree-Law no. 264/2007 of 24 July established a set of provisions aimed at consolidating the Iberian Electricity Market (MIBEL). Here one can highlight those relating to the anticipated termination of the Power Purchase Agreements (PPAs), the purchase of electricity by the last resort supplier and the extraordinary revisions of the electricity tariffs by ERSE in accordance with the Tariff Regulations.

With a view to bringing the electricity sector regulations into line with the new legal framework and the challenge of creating the MIBEL; ERSE began a revision of the regulations which was concluded in June 2007 with the approval of the electricity sector regulations revision (Order no. 17 774-A/2007 of 10 August), including the Tariff Regulations. The provisions established in the Tariff Regulations consolidate, on the one hand, regulation of the activities of electricity transmission and distribution and, on the other, the integration of the Iberian Electricity Market in the context of the aforementioned legislation now in place.

Thus, in August 2007 ERSE published new tariffs for the September – December 2007 period, implementing the main regulatory and legislative amendments up to that date, in accordance with that established in Decree-Law no. 264/2007 of 24 July.

Figure 3-14 shows the average prices of the End User Tariff in 2007 paid by Dc, Ib and Ig consumer types supplied by the last resort supplier. These average prices result from the application of the 2007 End User Tariff prices to Dc, Ib and Ig types of consumers.

Figure 3-14 - Average End User Tariff prices for Dc, Ib and Ig-type consumers between January and August 2007

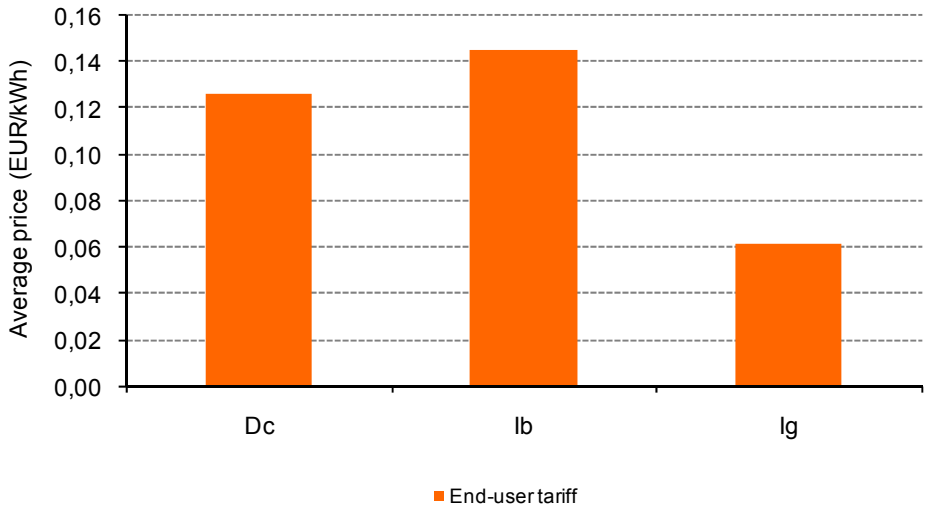


Figure 3-15 shows the structure of average End User Tariff prices paid by Dc, Ib and Ig-type consumers. In this figure the average price of each customer is broken down into the following parcels: Energy and Supply, Grids and General Interest Costs included in the grid access tariffs. Prices given for "Grids" in this figure exclude a number of regulated costs resulting from legal obligations, which are included in the General Interest Cost parcel.

Figure 3-15 - Breakdown of average End User Tariff prices for Dc, Ib and Ig-type consumers between January and August 2007

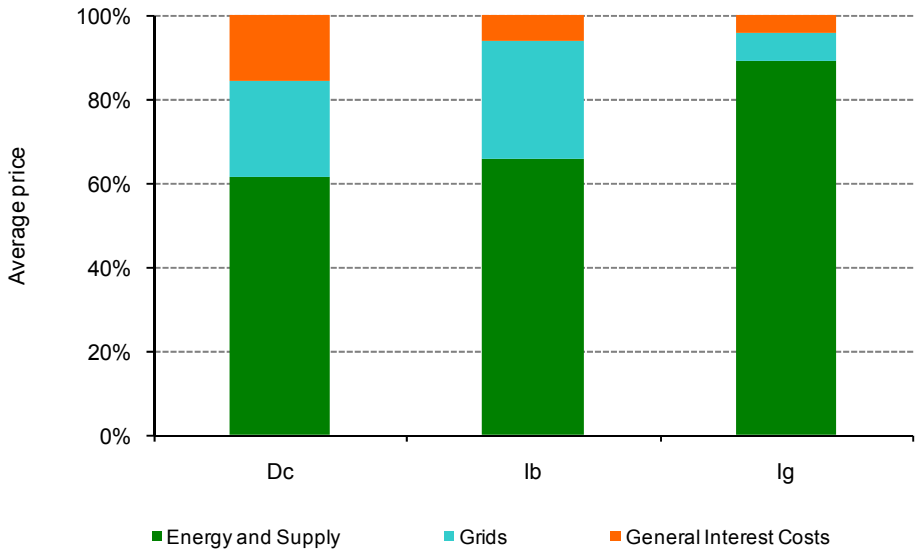


Table 3-18 summarises the average prices presented in Figure 3-14 and Figure 3-15**Erro! A origem da referência não foi encontrada.**.

Table 3-18 - Average End User Tariff prices between January and August 2007

Unit: €/kWh

Tariff	Consumer-type		
	Dc	Ib	Ig
Energy and Supply	0,0774	0,0953	0,0547
Grids	0,0285	0,0407	0,0040
General Interest Costs	0,0200	0,0088	0,0026
End-User Tariff (VAT excluded)	0,1259	0,1447	0,0613
End-User Tariff (VAT included)	0,1322	0,1520	0,0644

The extraordinary tariffs in force from 1 September 2007 onwards were based on the same assumptions as the tariffs for 2007, published in December 2006, with the exception of the PPA-related assumptions and those relating to the purchase of electricity by the last resort supplier. The amendments introduced by Decree-Law no. 264/2007 allowed for the consolidation of the MIBEL integration process, focusing on: (i) the activity of overall management of the system as a result of the early termination of the PPAs and, consequently, the Global Use of System tariff and the Grid Access tariffs; and (ii) the electricity purchasing activity by the last resort supplier and, consequently, the sale tariffs for end users. The main changes made were:

- Termination of the electricity purchasing activity by the NTG (National Electricity Transmission Grid) concession operator.

- Creation of the new activity of the buying and selling of electricity by the Commercial Agent responsible for management of the power purchase agreements for the Tejo Energia and Turbogás power plants.
- Formulation of the last resort supplier's costs of buying and selling electricity in a market environment, which have an effect on the energy tariff.
- Introduction of payment of Contractual Balance Maintenance Costs (CBMCs) in the power contracted in the Global Use of System tariff.
- Introduction of an cost for the activity of buying and selling electricity by the Commercial Agent in the Global Use of System tariff.
- Acceptance of costs involved in the tariff convergence in the Autonomous Regions of the Azores and Madeira in the Global Use of System tariff, where a reduction in tariff was given.
- Increase in the cost for Special Regime Generation (SRG) included in the Global Use of System tariff in relation to the value included in the tariffs approved in December 2006.

The legislative amendments in the context of termination of the PPAs recognised certain items included in the scope of other regulated activities in the general interest costs, such as the CBMCs and the Commercial Agent cost. Both the CBMCs and the Commercial Agent costs reflect the difference between the PPA costs and the costs for supply in the organised market. This "stranded cost" difference is paid by all electricity users in the Global Use of System tariff.

Parallel to this, the reduction in the tariff for the purchase of electricity by the last resort supplier, which came about in the context of this tariff revision, meant that the Special Regime Generation cost had to be increased.

The following table shows the changes in the end consumer tariffs as of 1 September 2007 as compared to those approved in December 2006. The overall tariff difference was -3.1%, though it was differentiated by voltage level and tariff option.

Table 3-19 - Change in tariffs for end users from September 2007 onwards, mainland Portugal

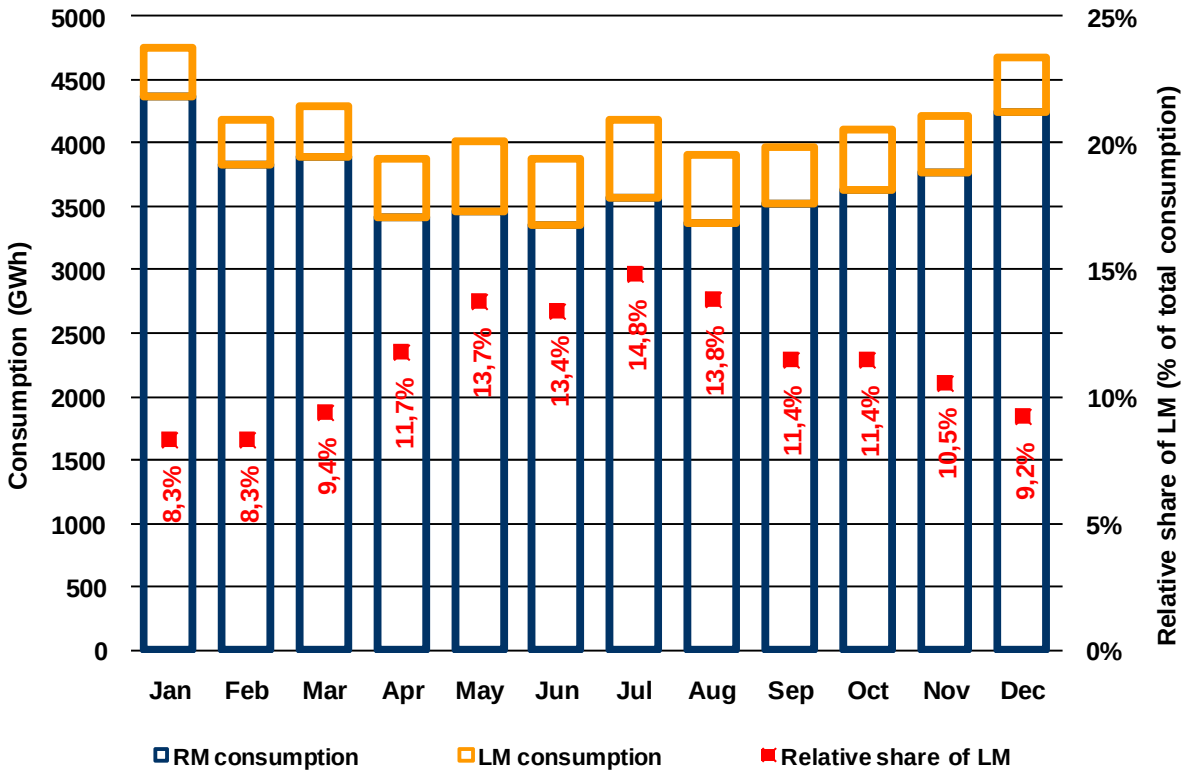
	Variation 2007Sep/2007Jan
End-user Tariffs	**-3,1%**
NV End-user	-4,3%
VHV End-user	-1,0%
HV End-user	-1,1%
MV End-user	-5,8%
LV End-user	-2,6%
SpLV End-user	-5,5%
StLV> 20,7 kVA End-user	-3,2%
StLV< 20,7 kVA End-user	-2,2%
PL End-user	-1,0%

DEVELOPMENT IN ELECTRICITY SUPPLY (RETAIL MARKET)

In the context of the regulated market, the supply of electricity is guaranteed by the last resort supplier, an entity that has been distinct in legal terms from the distribution system operator since the beginning of 2007. There are 10 other local operators, which, in terms of the energy they supply, do not account for more than 1% of the total consumption in mainland Portugal and which also count as last resort suppliers.

Figure 3-16 shows the development in 2007 of consumption in the regulated market (RM; supplied by the last resort supplier applying the regulated tariffs), consumption in the liberalised market (LM) and the relative share of consumption in that market in the total consumption in mainland Portugal.

Figure 3-16 - Development in consumption in the RM and LM and relative importance of the LM, mainland Portugal

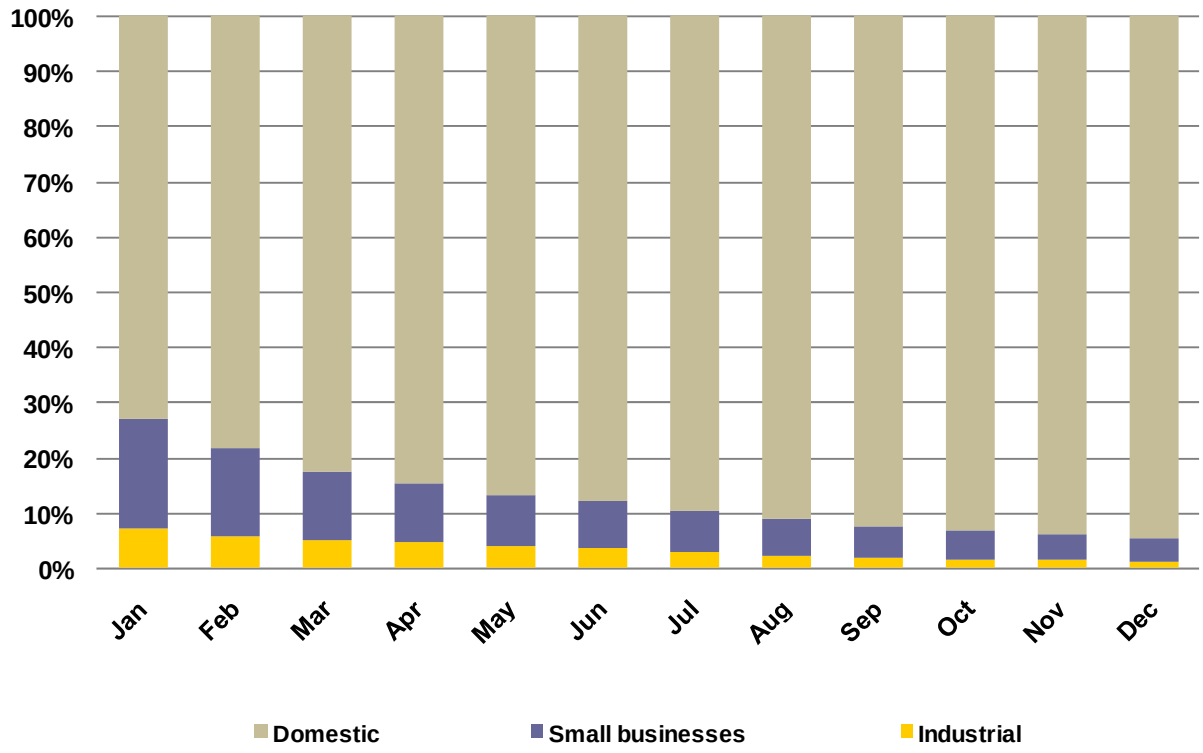


As borne out by Figure 3-16, the monthly development throughout the year of 2007 is characterised by an downward trend in the relative importance of LM consumption in overall national consumption beginning at the mid-year point after the increasing trend recorded in previous years had continued in the first half of the year. On the whole for 2007, consumption of energy from the liberalised market accounted for 11% of total national consumption, whereas, in 2006 a figure of 15.1% had been registered. The latter figure was already down from the historic peak of 21.7% in 2005.

The development in the power purchasing costs for free market supply and the comparability of the global energy costs for the end user in the liberalised market with the value of the corresponding integral tariff may both have contributed to this situation. One should note that, in the context of the liberalised market, there were four main operators at the end of 2007: EDP, Ends, Bedroll and Union Femora. Thus, in addition to the incumbent, all other suppliers in the liberalised market are traditional market agents in Spain, which favours the design of a strategy for their participation in the Portuguese market by means of the Iberian consolidation of operations. However, the fact that these agents do not have generation capacity in Portugal, together with the non-existence of capacity allocation mechanisms at the interconnection that would promote bilateral contracting, may have contributed to making the Portuguese market less attractive, particularly in the segment for customers with very large individual consumption (industrial customers).

The composition of the liberalised market during 2007 reflects, as already mentioned above, the total openness of the market that was effectively established in September 2006. Indeed, an overwhelming, and growing, majority of the customers belong to the segment most recently opened to liberalisation – the domestic or residential segment[15], as illustrated in Figure 3-17.

Figure 3-17 - Distribution of clients in the LM by segment

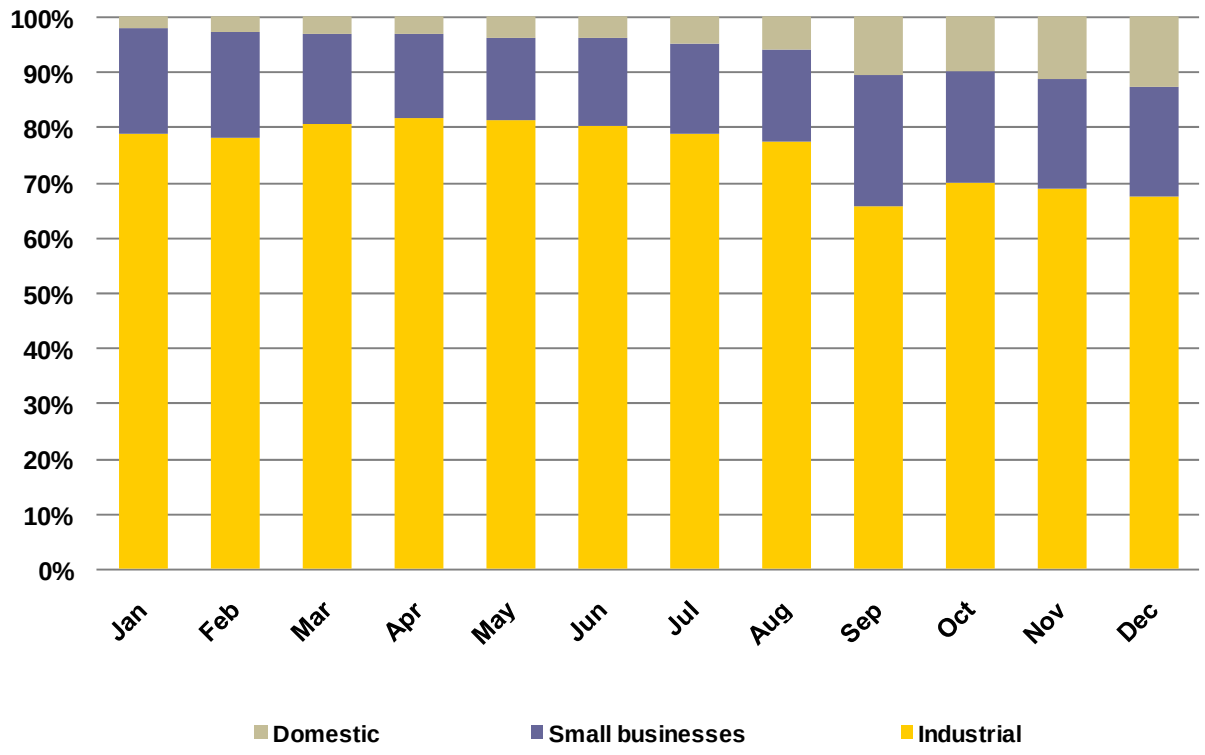


Source: EDP Distribuição

In contrast to the development in the number of customers, in terms of consumption in the liberalised market, the greater part is associated with industrial customers (medium, high and very high voltage customers), although the figures for this segment do begin to drop in the last quarter of the year, reflecting the switch of a considerable number of industrial customers to the regulated market. This trend can be observed in Figure 3-18, which also illustrates the trend towards growth in the relative share of consumption by domestic or residential customers.

[15] In the context of the opening of the Portuguese market, no customer segments were defined depending on the use they make of the energy they consume. However, there is a reasonable level of correspondence between the household customer and normal low voltage groups. Likewise, there is also correspondence between the group of customers using special low voltage and those with small-sized businesses, and also between customers using medium, high and very high voltage and industrial customers.

Figure 3-18 - Distribution of consumption in the LM by segment

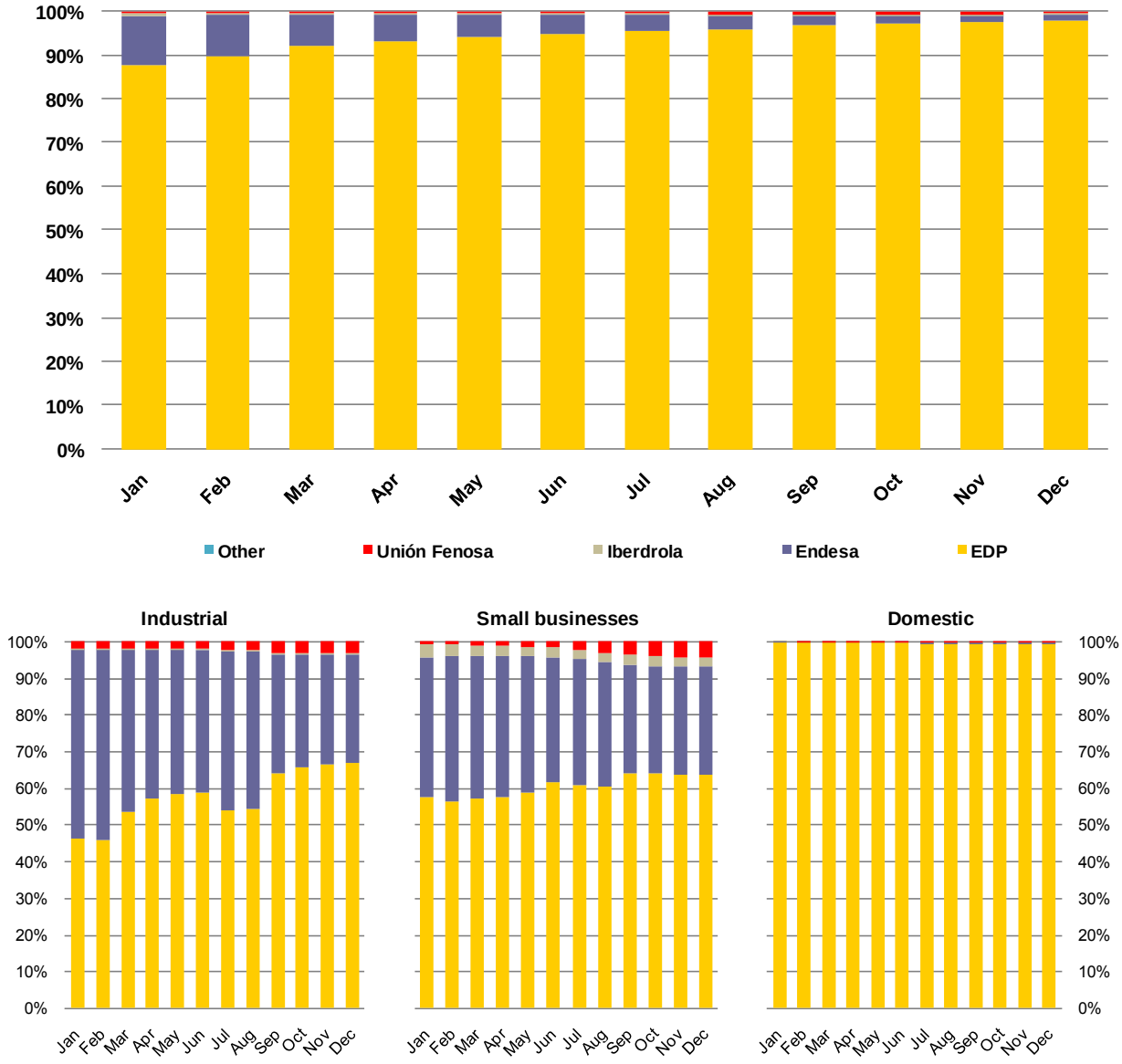


Source: EDP Distribuição

Furthermore, bearing in mind that customers are free to choose any qualified electricity supplier in the liberalised market, it is important to see how the market is distributed amongst the suppliers operating in it.

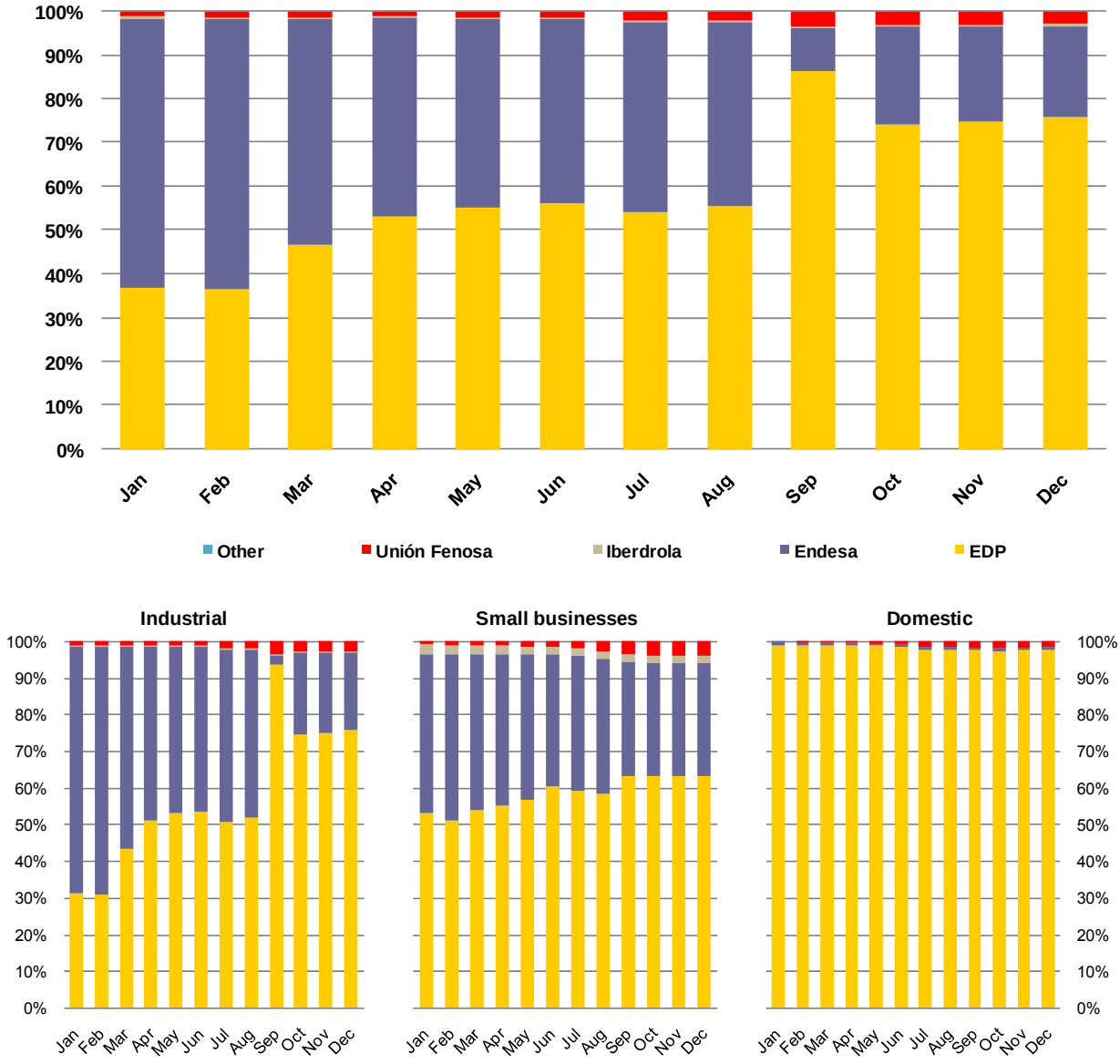
In 2007, the breakdown of the liberalised market in terms of customer numbers revealed an increase in the share for the operator linked to the incumbent in the Portuguese market. The EDP customer portfolio in the liberalised market accounted for approximately 88% of the total, growing to 97% by the end of the year. The EDP Group's market presence is greater in the domestic customer segment, which, in terms of numbers makes up the overwhelming majority of the customers in the LM, although the trend over the year in 2007 shows some gains in the remaining customer segments, as illustrated in Figure 3-19.

Figure 3-19 - Number of customers in the LM by supplier



An analysis of the breakdown of the liberalised market by entity in terms of consumption levels supplied reveals some differences as compared to the picture presented in terms of customer numbers. Thus, although it still maintains a very dominant position in the liberalised market, with a growing trend, EDP does not have such an expressive share of the consumption in liberalised market as it does in terms of customer numbers. Figure 3-20 shows the distribution of consumption in the liberalised market by supplier, including the breakdown by customer segment. It confirms the aforementioned development and trend.

Figure 3-20 - Consumption in the LM by supplier



An analysis by customer segment, both in terms of customer numbers and consumption supplied, shows that the suppliers that are independent of the incumbent have invested more in the higher unit consumption by customer segments, while the EDP Group has an across-the-board presence in terms of customer segments, even though it supplies practically exclusively to residential customers.

The market development in 2007, both in terms of customer numbers and the consumption supplied in the liberalised market, has led to a significant increase in the concentration in the liberalised market – be it measured by the three main operators' share or by the HHI. It is indeed symptomatic that, at the end of December, the number of suppliers with a market share of more than 5% of the customers in the liberalised market has been reduced to one, when there were two such companies at the beginning of the year.

When one looks at the diverse data available as a whole, from the trend in the relative share of consumption in the liberalised market in overall national consumption to the development of the liberalised market during the year 2007, they seem to point to a need for regulatory action to correct possible contrary incentives to the development of a competitive retail market. To this end, and in the wider scope of the MIBEL consolidation project, ERSE has contributed throughout 2007 to work on the regulatory harmonisation of the Iberian electricity sectors, including matters pertaining to the retail market.

SWITCHING SUPPLIER

The revision of the regulations for the electricity sector carried out by ERSE in 2005 sought to systematise and harmonise a pre-existing set of regulatory provisions on supplier switching, the greater part of which already existed. This systematisation endeavoured to be in line with the good practice principles defined by ERGEG.

The 2005 revision of the regulations established a maximum number of times a customer can switch suppliers in one year, i.e. four. This measure aimed at striking a balance between, on the one hand, the full exercise by the customer of the right to choose supplier and, on the other hand, the costs involved in the supplier switching process and the time requirements for achieving the switching procedures. In fact, according to Directive 54/2003/EC on the Single Electricity Market, such costs may not be directly attributed those who generate them.

In addition, customers with outstanding debts to the regulated supplier, which have not been contested in a court of law or by the established legal means, may not switch suppliers before settling such debts. This procedure has been adopted to make the system robust enough to avoid abusive behaviours that may potentially encumber the system with charges that would have to be paid by all customers.

The responsibility for the installation and management of metering devices (meters) in accordance with the regulations in force lies with the respective system operator, the information system that enables supplier switching having been attributed provisionally to the MV and HV distributor. The procedures adopted by that entity to manage the supplier switching process were approved by ERSE.

The supplier switching procedures currently in force are described briefly in the following:

- Management of the supplier switching process is based on an information system which provides for the exchange of messages among the various parties in the process (i.e. new supplier, current supplier and distribution operator, as manager of the supplier switching process).
- The above-mentioned rules concerning management of supplier switching process define the procedures and deadlines that must be complied with at each phase of the process. The process phases are given in flowcharts that must be provided by the MV and LV distribution operator on its

website. The messages exchanged in the supplier switching process, and their respective format, shall likewise be made available by the process manager on its website.

- The system operators are responsible for collecting data on customer consumption, applying consumption profiles and making consumption data available to the various stakeholders in the electricity market.
- The consumption amount to be taken into consideration in the supplier switching process (if the customer does not have telemetering) is obtained via a direct reading of the meter or consumption estimates made by the distributor. The customer, the old supplier or the new supplier can at all times request an extraordinary reading of the meter, bearing the costs incurred in connection with the provision of such a service.
- The distribution operator responsible for managing the supplier switching process has the duty of keeping up-to-date data corresponding to the delivery point information registration. Such data may be accessed free-of-charge by the customer or its new supplier—with prior authorisation given by the customer. All suppliers can thus access the data required to propose commercial offers to their potential customers. Data contained in the delivery point information registration have been approved by ERSE and is available on the ERSE website.
- Customers wishing to be supplied in the liberalised market by a given supplier may ask the new supplier to initiate the supplier-switching procedures through the supplier-switching platform.
- Suppliers have the responsibility of holding, together with the system operators, the Grid Use Agreements regarding the customers included as a whole in their portfolio. These customers do not need to sign individual agreements. Thus the suppliers take responsibility for paying the access tariffs corresponding to their total customers.
- The system operators are responsible for collecting data on customer consumption, applying consumption profiles and making consumption data available to the various stakeholders in the electricity market.

In the scope of their joint work on regulatory harmonisation for the MIBEL, in 2007 ERSE and its Spanish counterpart initiated a process of consultation with the market agents interested in defining the supplier switching procedures, with the aim of adopting a joint proposal to be sent to the respective national governments and with a view to consolidating the development of the MIBEL itself and, consequently, contributing to a more competitive and participative electricity market. This work is now in the completion phase.

REQUESTS FOR INFORMATION AND COMPLAINTS

One important factor in characterising the retail market has to do with complaints and requests for information submitted by consumers. At present, information is provided only by the distribution system operator and the last resort supplier, which supplied approximately 97% of consumers in 2007.

The following table shows the number of requests for information received in 2007, discriminated by subject matter. One can see that questions concerning contracts and billing or collection make up more than 90% of all requests for information.

Table 3-20 - Requests for information in 2007

Subject	Number
Contracts	**19.700**
Billing	**25.891**
Connection to grid	**379**
Technicall issues	**1.468**
Meters reading	**1.607**
Others	**78**
Total	**49.123**

The following table presents the complaints received, by subject matter. Billing and grid questions account for approximately 60% of all complaints.

Table 3-21 - Complaints in 2007

Subject	Number
Atendence service	**6.582**
Billing	**12.670**
Bill collecting	**1.706**
Reading	**1.477**
Metering equipment	**826**
Technicall issues	**5.995**
Grids	**21.517**
Others	**7.238**
Total	**49.125**

3.2.3 MEASURES FOR PROMOTING COMPETITION

3.2.3.1 DEFINITION OF THE CONCEPT OF DOMINANT OPERATOR

The geographic configuration of Portugal and Spain and the characteristics of the electricity systems of the two countries favour the establishment of a joint market in which consumers from both countries can freely choose their supplier. Indeed, the capacity for interconnection between the physical space of the Iberian Peninsula and the rest of Europe is still very low, rendering real access to other markets somewhat difficult. Furthermore, Portugal on its own has an electricity system, which, in terms of dimensions and number of players, is not conducive to the establishment of an efficient market.

Thus, the operating model for the MIBEL is the existence of a single daily market for the Iberian Peninsula, where, in both terms of electricity demand and supply, the offers of the market agents are aggregated with a view to obtaining a balance price that would correspond to a theoretical efficiency solution in the allocation of resources.

However, the presumption of the existence of a single price for the physical space of the Iberian Peninsula would only be possible if there were no capacity restrictions to the interconnection between Portugal and Spain. Only this fact would allow for the full integration of the two national markets.

The truth is that unlimited interconnection capacity is not a reality in the MIBEL context, as in most other cross-border electricity markets within the European Union, which means that there may be physical restrictions to the matching of offers process which the market returned in confronting the availabilities to pay and receive from, respectively, consumers and generators. In the current MIBEL context, the interconnection capacity scarcity management mechanism incorporates the application of a market splitting system. This mechanism consists of allocating resources on the basis of the market agents' offers. Thus, if it is impossible to come to a concrete result in matching purchase and sales offers for the

total area covered by the daily market and, hence, determine a single transaction price, differentiated prices are established for each of the areas determined by the physical capacity restrictions.

This market splitting principle as part of the scarcity management mechanism means that one has to very effectively consider the existence of possible situations of market dominance or power capable of altering or restricting the functioning of the markets. To this end, the Regulatory Compatibilisation Plan for the energy sector signed by the Spanish and Portuguese governments on 8 March 2007 establishes a set of subject matters for which the regulators of both countries, in the context of the MIBEL Council of Regulators, are to present a harmonised regulation proposal, with the respective governments having responsibility for reflecting the proposal in their legislation. The definition of the dominant operator and the methodology for determination thereof are included in this set of subject matters.

The main interest in establishing a dominant operator concept and, consequently, defining special obligations and restrictions for this type of market agent, results from the need to lessen the risks of exercise of market power by market agents with the potential to influence the formation of end user prices.

The text of the Regulatory Compatibilisation Plan already mentions that any company or business group that has a market share of more than 10% of the electricity produced in the MIBEL context shall be considered a dominant operator. In calculating the market share in terms of electricity generation, the Regulatory Compatibilisation Plan excludes Special Regime Generation, so the methodology to be applied must be limited to Standard regime generation. An analysis of the electricity sector structure is complex and, despite the liberalisation process already begun in the sector, the large players in the market remain vertically integrated, i.e. they operate simultaneously in generation and supply (with transmission being the only activity excluded from their operations). Accordingly, an analysis of the competition focusing solely on electricity generation and ignoring the existing vertical relationships would not provide a full and complete overview of the electricity market. Thus, it would be reasonable to carry out a market share analysis not only on the basis of electricity generation but also supply, linking the development in demand and the development in the supply structure.

As a consequence of this, it was deemed reasonable to establish lists of dominant operators in both electricity generation and supply that operate an integrated concept of dominant operator, identifying in which activities in the value chain each entity emerges in such a position in one of the activities or in both. Thus, the set of restrictions and obligations to be imposed would be adjusted to the activity in which each business entity is a dominant operator, also taking a global view of the business group into consideration.

The current reality in terms of integration of the MIBEL markets reveals a low degree of integration between the two systems. This situation may remain unchanged until the announced plans for investment in new generation and the expansion of the interconnection capacity between Portugal and Spain are implemented. Hence, until greater integration of the two markets becomes concrete reality, the study by

the regulators found it necessary, in order to protect the interests of consumers in both countries, to establish transitional conditions that define, and provide a framework for application of, the concept of the dominant operator, considering the reality of the existence of two different relevant geographic markets and not just one single market.

In this context, during this transitional period, a list of dominant Iberian operators was to be drawn up, while, in imposing the respective obligations and restrictions, paying heed to the competitive reality in each country (each relevant geographic market), with the exceptions established by means of a mutual and prior agreement by both the national regulatory bodies.

3.2.3.2 RELEASE OF GENERATION CAPACITY

Bearing in mind the structure of the Portuguese electricity generation market and the entry into force of the market-based system for all Portuguese players, in June 2007 the first generation capacity release auction was held in June 2007. It was followed by a second auction in September. These auctions, as known as Virtual Power Plant auctions or VPPs, are mechanisms that make it possible to place some the already installed generation capacity in the market via power purchase options.

The need to liberate electricity generation capacity through market mechanisms derives essentially from the search for mechanisms that help to less the market power exercised by players with a very dominant share in the generation and supply of electricity. This motivation means that the very way in which the capacity release auctions in the MIBEL are held is understood as an obligation or restriction that comes with the definition of the condition of dominant operator, which is why the way in which the auctions are implemented must take into consideration the definition and implementation of said concept.

Lessening the risks of an operator exercising too much power in the sector would recommend that the transfer of capacity be made by those operators where this risk is the most evident – by definition, the dominant operators. However, initially, in the Portuguese case, this was not the path taken in holding the two VPPs that have already taken place, given that REN Trading carried out the release of capacity through the power plants for which the PPAs still remain in place – the Pego plant (Tejo Energia) and the Tapada do Outeiro plant (TURBOGÁS).

As mentioned above, the first VPP auction was held in Portugal on 26 June 2007, the corresponding delivery period being the third quarter of the year.

The auction of 26 June (VPP1) began with a reserved price of €19/MW, which was the minimum biding price for the generation capacity options, with the exercise price being fixed at €24/MW. Five entities took part in this first auction, with demand exceeding the available supply of 100 MW by some 50%. Hence, the auction was made up of two bidding rounds, with the marginal closing price (premium) being fixed at

€21.10/MW for each of the hourly blocks of 1 MW purchased. The five entities that took part were Centrica, EGL, Endesa, Iberdrola and Unión Fenosa.

Thus, for each purchaser in the VPP1 auction, the total cost of exercising the option on acquired capacity was €45.10/MW (€24.00 + €21.10). There was also a fixed unit cost corresponding to the auction premium, which is settled irrespective of whether the capacity option is exercised or not.

In overall terms, in the third quarter of 2007 the price formed in the daily market in Portuguese MIBEL area was, for 867 of the 2,208 hours of that quarter, above the total VPP1 price (€45.10/MWh), which is approximately 40% of the time. One should note that the average price formed in the market in the Portuguese daily market within the MIBEL in the third quarter of 2007 was €44.69/MWh, meaning that the base load energy purchased in the daily market had a unit cost of €0.41/MWh less than the base load energy purchased in the VPP auctions.

Although there were also periods in which the total price in the first auction was lower than the daily market price for the Portuguese zone, assignment of the purchased quantities in an approach based on maximisation of financial gains entailed the assignment of these at all hours of the delivery period, given that the daily market price was never less than the exercise price defined for VPP1 and, consequently, allowed for the recovery of all the variable costs and, at least, part of the fixed costs of participation in the auction.

The second Virtual Power Plant auction was held on 21 September 2007, the delivery period being the fourth quarter of the year. At this auction, REN Trading put up a total electricity capacity of 140 MW for auction, with an initial reserve price for each hourly block of €19/MW and an exercise price of €27/MW.

Eight purchasers were qualified to take part in the second auction (VPP2) – Centrica, EGL, Endesa, Iberdrola and Unión Fenosa, which had already participated in VPP1, and the newcomers EDF Trading, Enel Viesgo and Sempra). The quantity put up for auction was 50 MW (of the 140 MW available), which resulted in a demand approximately equivalent to 35.7% of the available supply. Given these conditions, the auction consisted of one bidding round only, with the marginal closing price (premium) being fixed at €19.01/MW, which corresponds to a total exercise price of €46.01/MW (€27/MW + €19.01/MW).

The average price formed in the Portuguese zone of the MIBEL daily market during the month of October was €59.66/MWh, which means that the energy purchased in the second VPP was, for the months of October to December 2007, €13.65/MWh below the price paid for energy purchased in the daily market.

3.2.3.3 CONCENTRATION OPERATIONS AND RELATIONS WITH THE COMPETITION AUTHORITY

Pursuant to the respective legal provisions, the Competition Authority must be notified of any business transaction that classifies or could be classified as an operation towards market concentration. This also applies to the electricity sector. In such cases, the opinion issued by the Competition Authority must be

prepared in the light of the legal obligations of cooperation and coordination with the regulatory body responsible for the sector. ERSE is, therefore, called upon to issue a formal opinion in all such notified cases involving entities from the energy sector.

In 2007 the Competition Authority issued a total of three decisions regarding operations by entities involved in the electricity sector, calling on ERSE to issue respective opinion reports. These decisions can be consulted on the Competition Authority's website[16]. Generally speaking, the respective texts make reference to the opinion issued by ERSE. Two such notified situations and the respective decisions by the Competition Authority had to do with the electricity sector.

The electricity sector transactions assessed and decided upon in 2007 concerned business concentration operations involving entities in the Special Regime Generation segment in mainland Portugal, in one case, and the exploitation for electricity generation purposes of agricultural/livestock farming activities in the Autonomous Region of the Azores, in the other. They are situations in which the respective relevant market is either not at all open to liberalisation or is governed by a price fixing system determined by a specific legal framework.

[16] http://www.concorrencia.pt

4 REGULATION AND PERFORMANCE OF THE NATURAL GAS MARKET

4.1 REGULATION MATTERS

4.1.1 GENERAL

Decree-Law no. 30/2006 of 15 February 2006 transposed to the Portuguese legal system Directive 2003/55/EC concerning the common rules for the single natural gas market, thus materializing the strategic guidelines of the Council of Ministers' Resolution no. 169/2005 of 24 October 2005. This law establishes the new organisational framework of the National Natural Gas System, including the general principles governing the activities of natural gas reception, storage, transmission, distribution and supply, as well as the natural gas supplier switching process and market organisation. It creates the legal basis for activity unbundling as stipulated in Directive 2003/55/EC.

The law also establishes the criteria governing the granting of authorisations for carrying out each of the aforementioned activities, operation of grids and other infrastructures and the access to such grids and infrastructures by third-parties. It further specifies the duties of each operator and establishes accounting unbundling and transparency. Lastly, it provides for safeguard and derogation measures related with commitments assumed in the context of take-or-pay agreements or vis-à-vis emerging and isolated markets.

Decree-Law no. 30/2006, of 15 February 2006 was complemented by Decree-Law no. 140/2006 of 26 July 2006, which established the legal regimes applicable to the activities of natural gas transmission, underground storage, reception, storage and regasification at liquefied natural gas (LNG) terminals and distribution of natural gas. It also defined the legal bases for concessions and the type of awarding procedures applicable.

Decree-Law no. 140/2006 of 26 July defined the following eligibility calendar:

- On 1 January 2007 the standard regime generation power plants became eligible.
- On 1 January 2008 customers with an annual consumption level equal to or above 1 million normal cubic metres become eligible.
- On 1 January 2009 customers with an annual consumption level equal to above 10,000 normal cubic metres become eligible.
- From 1 January 2010 all natural gas customers in Portugal are eligible.

In 2007, none of the standard regime generation generators became a player in the market, with all natural gas supply contracts signed before the opening of the market remaining in force.

4.1.2 MECHANISMS FOR MANAGING CONGESTIONS AND ALLOCATING AVAILABLE CAPACITY IN THE INFRASTRUCTURES

The natural gas infrastructures are very recent in Portugal and their capacity by far exceeds present needs. Accordingly, no congestion has been registered in National Natural Gas System infrastructures. Nevertheless, the regulatory framework approved in 2006 and in force in 2007 includes a mechanism for allocating available capacity and provides for the possible occurrence of congestion, defining the principles to be adopted in such situations.

4.1.2.1 CAPACITY ALLOCATION IN THE NATIONAL NATURAL GAS SYSTEM INFRASTRUCTURES

Allocation of capacity in the national natural gas system's infrastructures is based on prior scheduling and assignment processes for the said infrastructures.

The scheduling involves regular information processes, whereby market players inform the national natural gas system infrastructure operators of the capacity they need to use over a given period of time. The regulatory framework currently in force provides the existence of annual, monthly and weekly scheduling processes, regarding the transmission network, the distribution grids, the LNG terminal and the underground storage infrastructures.

Assignments are communication processes in which forecasts for capacity use in the national natural gas system's infrastructures for the next day are transmitted. They must therefore reflect a very accurate forecast of consumption.

Capacities programmed and assigned by the market players must be accounted for according to the forecast portfolio consumption.

Checking mechanisms have been linked to the scheduling and assignment processes with a view to checking the overall feasibility of all scheduling requests made by the market agents. The infrastructure operators, coordinated by the transmission system operator, in its role as global technical manager of the national natural gas system, allocate the programmed and assigned capacities after the checking mechanisms have confirmed the global feasibility of all scheduling and assignment requests. If such feasibility is not confirmed, then the congestion management mechanism described comes into play.

The market players should be sequentially involved in scheduling until assignment takes place, inasmuch as capacities allocated in a scheduling process need to be confirmed in the subsequent processes – in case the market player really wants to use such capacity. Previously allocated capacities that are not confirmed in the subsequent scheduling processes are again made available to the market players (*use it or lose it*).

The regulatory framework currently in force safeguards the allocation of capacity in the national natural gas system's infrastructures in connection with long-term natural gas supply contracts of the take-or-pay type signed prior to the publication of Directive no. 2003/55/EC of the European Parliament and Council, dated 26 June 2003, for supplying consumers in the national territory. This provision does not exempt market operators holding such contracts from participating in the scheduling and assignment processes.

4.1.2.2 CONGESTION MANAGEMENT MECHANISM

The congestion management mechanism is activated whenever the overall scheduling and assignment requests of the market players are not feasible. In such circumstances the points of the national natural gas system are identified where congestions are predictable and capacity is allocated by means of capacity auctions.

4.1.3 REGULATION OF THE PUBLIC NATURAL GAS SYSTEM OPERATORS

4.1.3.1 TARIFFS FOR ACCESS TO NATURAL GAS INFRASTRUCTURES

FORMS OF REGULATION

The allowed revenue and the forms of economic regulation of the diverse regulated activities associated with the natural gas sector infrastructures are established in the Tariff Regulations.

ERSE's economic regulation and, consequently, the procedures used in determining the regulation parameters vary depending on the type of activity. Although rate of return regulation applies to all activities, as an incentive to investment, in all infrastructure management activities, with the exception of underground storage, the cost of capital – i.e. costs resulting from the remuneration of assets considered for regulatory purposes – and the amortisation of such assets are smoothed for the concession period.

Cost-of-capital smoothing, for each year of concession, is the result of the multiplication of a constant unit capital cost by the amounts of natural gas that will predictably be processed in the framework of the activity. In a markedly young sector such as natural gas, cost-of-capital smoothing helps to divide the costs related with infrastructures (i.e. amortisation and remuneration of assets), the capacities of which are not yet fully used, among present and future consumers. This method is applied to calculate the income from activities related with the LNG reception, storage and re-gasification terminal, the natural gas transmission network and the natural gas distribution grids.

In rate of return regulation, the main regulation parameter is the cost-of-capital rate, a value used as rate for remunerating the assets base accepted for regulation. This parameter is calculated at the beginning of each regulation period. The calculation method is based on the *Capital Asset Pricing Model* (CAPM).

The regulation period established for regulated natural gas activities is three gas years. The first period is currently running. It began on 1 July 2007 and will end on 30 June 2010. In the case of the activities related with distribution system operators and regulated natural gas suppliers, regulation only began in July 2008, meaning that the first regulation period will only be two years. Each gas year runs from 1 July to 30 June of the next year.

PROCEDURES AND METHODOLOGY FOR CALCULATING ACCESS TO NATURAL GAS INFRASTRUCTURE TARIFFS

Until 2006 the structure of the natural gas sector in Portugal was that of a vertically integrated monopoly and customers did not have the option of choosing their supplier. As the right of access to the grids has not yet been allocated, there were no grid use tariffs. The tariffs for the sale of natural gas to household customers (up to 10,000 m^3(n)/year) were approved by the Ministry for the Economy and Innovation. For consumption in excess of 10,000 m^3(n)/year, tariffs were negotiated between the holders of concessions and licences and their respective customers.

In 2007 ERSE began to establish tariffs for each regulated activity in the natural gas sector. In accordance with Decree-Law no. 140/2006 of 26 July 2006, in the first gas year of 2007-2008 the ERSE regulation work covers the establishment of the following tariffs: Transmission Use of Network, Use of LNG Reception, Storage and Regasification Terminal and Use of Underground Storage.

In the second gas year, i.e. 2008-2009, ERSE shall extend its regulation to the activities of Natural Gas Distribution, Natural Gas Supply and Natural Gas Buying and Selling, establishing the Distribution Use of Network Tariff, Supply Tariff, Energy Tariff and the resulting End User Sale Tariff.

The Tariff Regulations for the natural gas sector establish, in detail, the calculation methods for the natural gas tariffs and prices, as well as the forms of regulation for the revenue allowed for the regulated companies in the sector.

Tariff calculations must comply with the calculation methodology previously established in the Tariff Code. Natural gas tariffs are established once a year. The tariffication process – including its timeframe, is also laid down in the regulations. ERSE publishes the tariffs valid from 1 July for the following gas year up to 15 June.

The following brief characterisation of the Portuguese tariff system for the natural gas sector serves to contextualise the tariff calculation methodology.

Thus, the infrastructure access tariffs that apply to all natural gas consumers for access to the infrastructures in question are considered, more specifically the Grid Access tariffs, Use of the LNG Reception, Storage and Regasification Terminal Tariff and Use of Underground Storage Tariff.

Generally speaking, these infrastructure access tariffs are paid by suppliers on behalf of their customers. They may also be directly paid by customers that also function as market agents (i.e., customers that buy energy directly in the market and are responsible for managing their scheduling imbalances).

TARIFFS AND REGULATED ACTIVITIES OF THE NATURAL GAS SECTOR

Income generated by regulated activities is recovered by way of specific tariffs, each with its own tariff structure and characterised by a given set of billing variables.

Tariff prices are established in each activity in such a way that their structure reflects the structure of marginal or incremental costs and also enables the recovery of income allowed in each activity.

Tariff charging and billing are based on the principle of non-discrimination as regards the final energy use. Tariff options are available to all consumers.

The Global Use of System tariff is a means of recovering income generated by the global system management activity. It includes not only the system's operation – including costs inherent to the systemic coordination of the infrastructures of the national natural gas system (namely, the amounts of gas used to ensure the system's intraday operation), costs originated by the natural gas supplier-switching logistics activity and the ERSE costs allocated to the natural gas sector – but also some costs related to energy policy or general economic interest, including, in particular, the expected costs of the Plan for Promoting Efficiency in Natural Gas Use.

The Transmission Use of Network tariff is a means of recovering income generated by the natural gas transmission activity – including the operation, development and maintenance of the natural gas transmission network.

The Use of the LNG Reception, Storage and Regasification Terminal tariff is a means of recovering income from the activity of LNG reception, storage and re-gasification, which includes the operation, development and maintenance of the LNG terminal. This tariff is made up of three tranches, corresponding to the LNG reception, LNG storage and LNG regasification services

The Use of Underground Storage tariff is a means of recovering income from the natural gas underground storage activity, which includes the operation, development and maintenance of underground storage.

From the third gas year onwards, these last three tariffs will also include costs related to the promotion of environmental performance and the income from capacity allocation in the infrastructures in congestion situations.

GRID ACCESS TARIFFS

Customers wishing to use the natural gas infrastructure must pay the respective access tariffs. Grid access is paid by all natural gas consumers and includes the following tariffs: Global Use of System, Transmission Use of Network and Distribution Use of Network. Customers that chose their supplier in the market pay the grid access tariffs and freely negotiate their purchase of natural gas with their supplier.

The Use of the LNG Reception, Storage and Regasification Terminal tariff and the Use of Underground Storage tariff are paid only if the customer wants to use the respective infrastructures.

Calculation of end user tariffs charged by the last resort supplier to its customers is based on the tariffs by activity included in grid access, plus the Energy Tariff and the Supply Tariff.

Prices of access tariffs for each billing variable are determined by adding up the corresponding tariff prices by activity. The additive system will be gradually applied to the natural gas tariffs by way of being a restricting mechanism for increases resulting from tariff convergence.

ACCESS TO NATURAL GAS INFRASTRUCTURES TARIFF PRICES

As mentioned above, ERSE began to establish tariffs in the natural gas sector by regulated activity in 2007.

Tariff pricing is duly justified and is preceded by consultation with the Tariff Board, the ERSE body on which both consumers and regulated companies are represented. ERSE publishes and discloses the prices of the infrastructure access tariffs in the *Diário da República,* the official gazette, its own website and through information leaflets. In addition, the regulations state that the infrastructure operators are obliged to inform and advise users of the natural gas infrastructures about the tariffs and prices payable for access to them and about the most advantageous and appropriate tariff options in each given situation – in particular by preparing and publishing information leaflets.

The following table shows the proportion of income for each of the tariffs to be paid for access to the high pressure natural gas infrastructures in the 2007 – 2008 gas year.

Table 4-1 - Discrimination of costs payable for access to high pressure infrastructures

ACCESS TARIFFS	REVENUES (10^3 EUR)
GLOBAL USE OF SYSTEM	12.322
TRANSMISSION USE OF NETWORK	82.419
USE OF LNG RECEPTION, STORAGE AND RE-GASIFICATION TERMINAL	29.426
USE OF UNDERGROUND STORAGE	12.949

The following table shows the average prices payable for access to the various high pressure natural gas infrastructures based on the energy transported by each infrastructure.

Table 4-2 - Average prices payable for access to high pressure (HP) natural gas infrastructures

HP infrastructure use tariff	Average price (€/MWh)
Global Use of System Tariff + Transmission Use of Network Tariff	1,83
Use of the LNG Reception, Storage and Regasification Terminal Tariff	1,18
Use of the Underground Storage Tariff	0,02
Total use of infrastructures (considering energy at the transmission grid exit point)	2,65

The use of natural gas is subject to VAT at the rate of 5%.

INFORMATION PROVIDED BY SYSTEM OPERATORS ON TARIFFS AND GRID CONNECTIONS

The legislation and regulations on the natural gas sector impose upon the transmission and distribution system operators a wide range of duties of information to consumers and market agents The duties of informing the grid users are established in the Commercial Relations, Tariff, Access to Grids; Infrastructures and Interconnections and Quality of Service Regulations and in the system use contracts.

The system operators are obliged to inform all interested parties about the regulated tariffs and prices they practise. They also have the duty to inform and advise on the best options available.

As regards the disclosure of information on tariffs, the role of ERSE and the suppliers should also be noted. ERSE publishes complete information on the tariffs and produces information leaflets aimed at informing consumers of tariff prices and helping them to understand them.

The suppliers likewise play an important role in informing consumers about tariffs, in particular the network use tariffs. It should again be borne in mind that Portuguese customers prefer to have direct relations with their supplier. The customer – system operator relationship arises solely for purposes of

requests for grid connection, technical assistance (faults) and communicating meter readings. In their bills, suppliers distinguish the amount corresponding to grid use.

The regulations state that the system operator must inform and advise the grid connection applicant, especially as regards the pressure level appropriate to the connection, in order to secure the best technical and economic conditions, considering all aspects involving the connection application. This mandatory duty to inform involves the preparation and publication of information leaflets on the procedure required to make connections to the grid, as well as the mandatory submission of an estimate for the requested connection. The estimate for the connection charges must contain, amongst other things, the following information:

- Identification of the connection elements required, with indication of the respective technical features and design basis.
- Identification of the grid connection point.
- Type, quantity and cost of the main materials, equipment and manpower used for the connection.
- Terms of payment.
- A date by which the connection will be established and period for which the estimate is valid.

The terms of payment of grid connection charges, and the respective deadlines, are established in the Commercial Relations Regulations approved by ERSE.

4.1.3.2 QUALITY OF SERVICE

The Quality of Service Regulations for the natural gas sector came into force in July 2007. The first gas year ends on 30 June 2008, meaning that, as yet, we cannot report on the sector in terms of quality of service.

4.1.3.3 BALANCING

The opening of the market on 1 January 2007, which initially included the power plants, led to the publication of a new legislative and regulatory framework containing the guiding principles for management of the balance between natural gas supply and demand in the system.

Market players must manage the natural gas supply and demand balance within the leeway margin resulting from the maximum and minimum stock allocated to each of them. If a market player violates the maximum and minimum stock limits allocated to it in the transmission network, this creates a situation of individual imbalance, which is subject to a penalty scheme to be approved by ERSE in the framework of the incentive mechanism to restore the individual balance. The penalties are established following a proposal to be made by the transmission system operator, in the context of its global technical

management of the system. The application of penalties does not release market players from their obligation to correct their individual imbalances and they must restore their stock to within the established limits.

Infrastructure operators within the national natural gas system are responsible for proposing the amounts of natural gas that correspond to the maximum and minimum stocks of their infrastructures, as well as the method for allocating such stocks to market players. The method for allocating the amounts of natural gas to market players is approved and published by ERSE.

The creation of an operating reserve has been provided for with a view to securing the integrity of the national natural gas system's infrastructures, particularly the transmission network. This operating reserve is the amount of natural gas required to meet short-term needs, resulting from possible differences between the profiles of injection into and extraction from the transmission network in the intraday period and the restoration of natural gas amounts due to minimum stock infringements by the market players, which may threaten the integrity of the transmission system.

Operating reserves must be constituted by the market players and use thereof is the exclusive responsibility of the transmission system operator in its role as global technical manager of the system. The amounts of natural gas allocated to the operating reserve, as well as the method for determining the tranche corresponding to each market player, are approved by ERSE through a proposal made by the transmission system operator in its role as global technical manager of the system.

4.1.3.4 ACCESS TO STORAGE, LINEPACK AND OTHER SYSTEM SERVICES

Access to natural gas underground storage facilities is regulated in a transparent and non-discriminatory way.

The mechanism adopted for allocating capacity in the natural gas underground storage facilities provides for scheduling plans, which are open to all market players with natural gas underground storage contracts, under which capacities available for commercial purposes within specific timeframes are allocated. If demand exceeds the supply in terms of the capacity made available by the underground storage infrastructure operators, then such capacity will be allocated by means of auctions.

Linepack access by market players, meanwhile, is a direct consequence of their access to the Natural Gas National Transmission Network (RNTGN). Indeed, the RNTGN operates with reference to two (maximum and minimum) stock limits, which are determined annually and made available by the RNTGN operator, in line with the regulations currently in force.

The difference between the annual values of the maximum and minimum stock of natural gas in the RNTGN is the linepack, which is made available to market players in proportion to the capacities allocated to them in the RNTGN. Thus each market player with allocated capacity in the RNTGN is

automatically given a tolerance value, which is calculated as the difference between its maximum and minimum individual stock. This tolerance must be managed in order to secure the balancing of supply and demand within the RNTGN.

4.1.4 SEPARATION OF INFRASTRUCTURE OPERATORS

Decree-Law no. 30/2006 of 15 February established the general principles governing the organisation and functioning of the National Natural Gas System (SNGN) in Portugal. This law established the unbundling, in legal terms and in terms of assets, of business operations in the natural gas sector. Therefore the SNGN now consists of the following activities:

- LNG Reception, Storage and Regasification
- Underground storage of natural gas
- Natural gas transmission.
- Natural gas distribution.
- Natural gas supply.
- Natural gas supplier-switching logistics operation.

Decree-Law no.140/2006 of 26 July defines the general principles for the organisation and functioning of the SNGN activities. It establishes the legal regime applicable to each activity and to the organisation of the natural gas markets, completing the transposition into Portuguese law of Directive 2003/55/EC of the European Parliament and Council of 26 June that was initiated with Decree-Law no. 30/2006 of 15 February, and also transposes Council Directive no. 2004/67/EC of 26 April into Portuguese law.

In 2006 the assets associated with the activities of LNG reception, storage and regasification, underground storage of natural gas (partially) and natural gas transmission were transferred from the Galp group to the REN group. As the latter has no interests in the remaining SNGN activities, this transfer ensures compliance with the principles of the Directive.

It should be remembered that the natural gas regulations published by ERSE in 2006 strengthen the principles of business unbundling.

ACCOUNTING UNBUNDLING

The Tariff Regulations issued by ERSE stipulate that operators involved in the activities of LNG reception, storage and regasification, natural gas underground storage, natural gas transmission, natural gas distribution and wholesale and retail last resort supply must forward to ERSE, for each gas year, the regulated accounts for each activity, so that their balance sheets, profit and loss statements (plus

respective notes) and investments can be ascertained. These must be accompanied by an audit report documenting compliance with all the regulation principles defined. The companies must also forward to ERSE balance sheet, profit and loss statement and investments estimates for the gas year in course and the forecast values for the balance sheets, profit and loss statements and investments for the following gas year and in the case of LNG Reception, Storage and Regasification, natural gas Transport and natural gas Distribution activities until the end of the concession period.

ERSE has the power to accept or refuse the figures sent by the companies for the purpose of calculating tariffs. In the event of refusal, it will always justify its decision.

4.1.4.1 ACTIVITY-BASED ANALYSIS

Mainland Portugal currently has one LNG terminal operator, two underground storage operators, one transmission system operator, 11 distribution system operators and 11 last resort retailers. Only four of these retailers are separate in legal, assets and accounting terms from the distribution operators (these are the companies with more than 100,000 customers).

4.1.4.1.1 LNG RECEPTION, STORAGE AND REGASIFICATION OPERATOR

The LNG Reception, Storage and Regasification operator – REN Atlântico – is independent, in terms of assets, of the other activities in the natural gas sector and engages in its activity on a public service concession basis. The terms of its concession contract were established by Council of Ministers Resolution no. 106/2006 of 3 August. REN Atlântico is the successor to Transgás Atlântico, a GALP group company that had operated this activity since its incorporation in 2004 (the year operations began).

REN Atlântico is 100% owned by REN – Redes Energéticas Nacionais, SGPS, S.A. As at 31 December 2007 the company had one customer nationwide, Galp Gás Natural.

This operator's activity is divided into three areas – Reception, Storage and Regasification, which are unbundled in accounting terms. The assets allocated to this operator are described in Section 5.2.2.3.

4.1.4.1.2 UNDERGROUND STORAGE OPERATORS

There two operators active in the area of underground storage – REN Armazenagem and Transgás Armazenagem. This activity is operated on a public service concession basis and the terms of both concession contracts were laid down in Council of Ministers' Resolutions no. 107/2006 and no. 108/2006, both of 3 August 2006.

Transgás Armazenagem, a GALP group company, has been operating in this area exclusively since its incorporation (in 2004), in the context of the concession granted to Transgás, which includes the transmission and import of natural gas into Portugal.

Under the restructuring of the national natural gas system in 2006, part of the underground storage assets remained in the hands of Trangás Armazenagem, while the rest were transferred to a new underground storage operator, REN Armazenagem, which is part of a group that has no interests in the natural gas supply business.

Transgás Armazenagem is 100% owned by Galp Gás Natural. Its only customer is the parent company.

REN Armazenagem wholly owned by REN – Redes Energéticas Nacionais, SGPS, S.A. Its only customer is Galp Gás Natural, SA.

The assets allocated to these operators are described in Section 5.2.2.2.

REN Armazenagem and Transgás Armazenagem have entered into an agreement to share their ground-level storage facilities. REN Armazenagem owns all the ground-level infrastructures. The agreement, covering the use of the ground-level facilities at Carriço, establishes that REN Armazenagem guarantees Transgás Armazenagem access to the leaching facilities acquired by REN Armazenagem, in order to finish the caves to be built by Transgás Armazenagem.

Transgás Armazenagem and REN Armazenagem are independent in legal terms in relation to the other natural gas sector activities.

4.1.4.1.3 NATURAL GAS TRANSMISSION SYSTEM OPERATOR

The natural gas transmission activity is carried out on a public service concession basis by the operator REN Gasodutos. This company is legally independent, in terms of assets, of all other activities in the natural gas sector. The terms of the concession contract were established in Council of Ministers Resolution no. 105/2006 of 3 August. REN Gasodutos signed the concession contract with the Portuguese government for a period of 40 years on 26 September 2006.

Transgás, a GALP group company, was an operator in the natural gas transmission sector since its incorporation in 1993. The granting by the government of the National Natural Gas Transmission Network (RNTGN) concession to REN Gasodutos follows the decision to separate the activity of natural gas supply from that of transmission. The concession holder's responsibilities are as follows:

1. The transmission of natural gas in its gaseous state via the high pressure gas pipeline network.
2. Global technical management of the SNGN.

3. The planning, development and expansion of the National Natural Gas Transmission Network (RNTGN) and construction of the respective infrastructures and the planning of the National of LNG Transmission, Storage Infrastructure and Terminal System (RNTIAT) and the use of the respective infrastructures.
4. Management of the interconnection between the RNTGN and the international high-pressure transmission network and of the connection with the underground storage infrastructures and LNG terminals.
5. Control of the creation and maintenance of the natural gas security reserves.

The main assets allocated to the concession are:

1. The high pressure gas pipeline network for the transmission of natural gas in Portugal.
2. Facilities for the compression, transmission and pressure reduction of natural gas for delivery to distribution networks or end users – including all the control, regulation and metering equipment and the gas pressure reduction stations (class 1).
3. The telecommunications, telemetering and remote control facilities and equipment assigned to the management of natural gas reception, transmission and delivery facilities.

In carrying out its functions, the transmission system operator has unbundled the following activities:

- Natural gas transmission.
- Global Technical Management of the System.

The above activities are unbundled in accounting terms.

REN Gasodutos is 100% owned by REN – Redes Energéticas Nacionais, SGPS, SA.

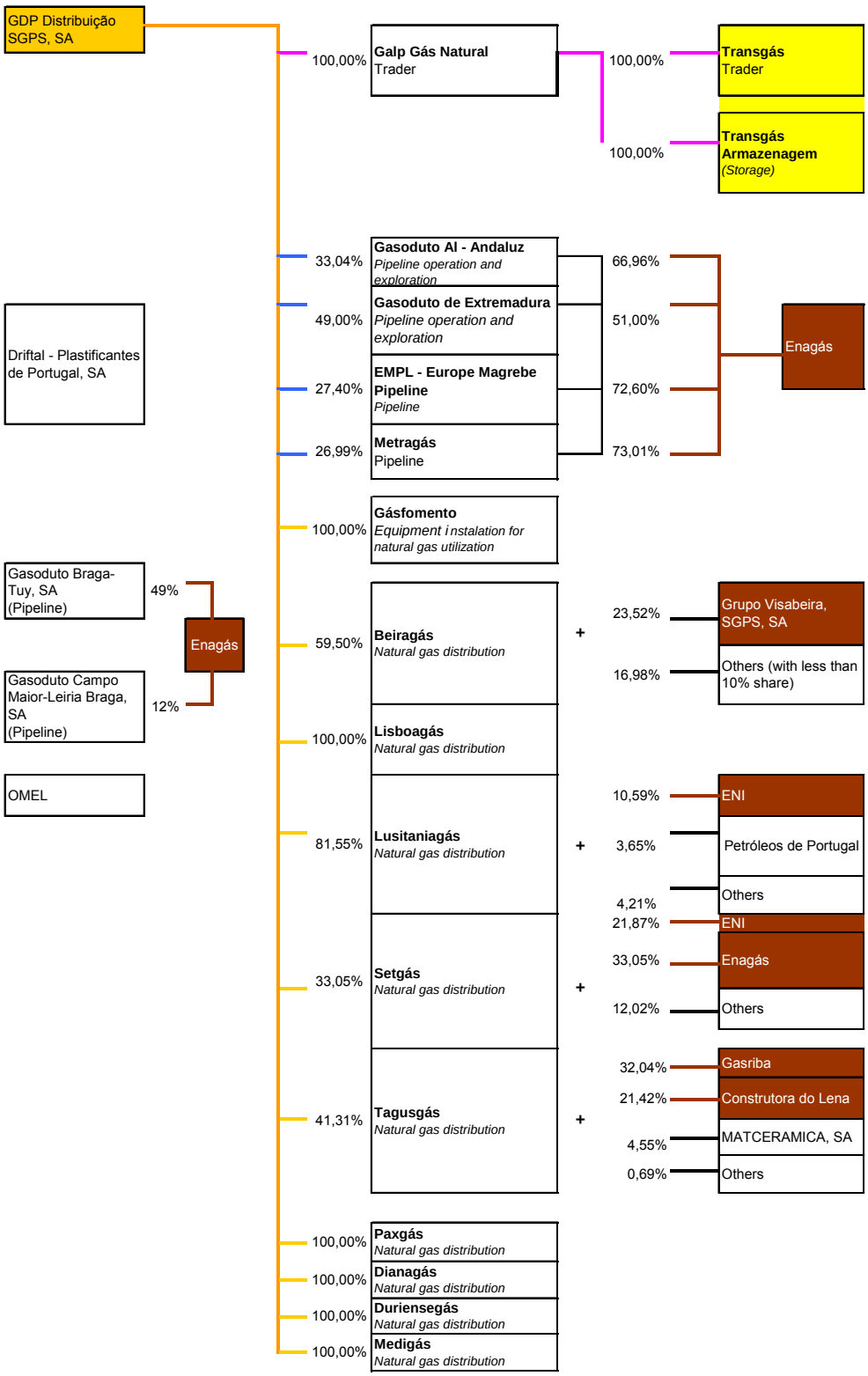
4.1.4.1.4 NATURAL GAS DISTRIBUTION SYSTEM OPERATORS

The natural gas distribution activity is carried out on a public service concession basis. There are six concession holders: Beiragás, Lisboagás, Lusitaniagás, Portgás, Setgás and Tagusgás, and five licence operators: Dianagás, Dourogás, Duriensegás, Medigás and Paxgás.

These companies are legally independent of the other activities in the natural gas sector.

Figure 4-1 presents the shareholder structure of distribution system operators as at 31 December 2007.

Figure 4-1 - Shareholder structure of distribution system operators



The bases for the natural gas distribution concessions were established in Decree-Law no. 140/2006 of 26 July. The natural gas distribution company contracts were signed in April 2008.

The aforementioned law established the following responsibilities for the concession holder:

1. To receive, convey and deliver natural gas at medium and low pressure;
2. To build, use, operate, maintain and expand all the infrastructures belonging to the National Natural Gas Distribution Network in their respective concession areas, as well as the facilities required to operate.

As of July 2007, the regional distribution concessionaires and the licensees for local distribution with more than 100,000 customers also to supply gas through independent companies (legal separation), as determined in Decree-Law no. 140/2006 of 26 July (Portgás, Lisboagás, Setgás and Lusitaniagás).

In performing its allotted tasks, the natural gas distribution network operator must separate the following activities:

- Natural gas distribution.
- Access to the RNTGN.

The companies have already unbundled the above-mentioned activities in terms of organisation and accounting. The first regulation period will begin on the 1 July 2008.

The following table lists the natural gas consumption levels and the respective shares by catchment area of the different distribution system operators, as at 31 December 2007.

Table 4-3 - Natural gas consumption

Information on the distribution system operators			
Distributor	**Consumption 10^3 m^3 (n)**	**Market share**	**No. of customers**
Lisboagás	214 710	30,55%	462.398
Portgás	214 780	30,56%	170 841
Lusitaniagás	154 300	21,95%	159 097
Setgás	36 010	5,12%	126 227
Beiragás	31 176	4,44%	30 791
Tagusgás	27 413	3,90%	22 130
Duriensegás	11 067	1,57%	15 235
Medigás	6 543	0,93%	8 683
Dianagás	5 177	0,74%	2 893
Dourogás	1 631	0,23%	4 905
Paxgás	0	0,0%	0

Source: The above-listed companies

4.1.4.1.5 SUPPLY

The supply activity involves the buying and selling of natural gas for supply to end users or other agents, by way of bilateral contracts or participation in other markets.

Decree-Law no. 140/2006 of 26 July established that companies with more than **100,000 customers must** operate the activity of last resort supplier through independent companies (this applies to Portgás, Lisboagás, Setgás and Lusitaniagás).

The supply activity is legally unbundled from other activities for operators serving more than 100,000 customers and is operated in a freely competitive market, remaining subject to a licence to be awarded by

the government. Last resort natural gas supply is the only exception to this provision, and it remains subject to regulation.

The last resort supplier remains subject to public service obligations in the areas served by the public natural gas system. Operators must also obtain a licence to engage in this activity. The activity is legally unbundled from the other activities and is subject to regulation. Legal unbundling is only required when the number of customers is higher than 100,000.

Decree-Law no. 140/2006 established that Transgás should be awarded a last resort supply licence for all customers with an annual natural gas consumption of 2 million normal cubic metres or more, excluding standard regime electricity generators, until 2028. For smaller amounts of natural gas, licences are to be awarded to the existing distribution operators lasting as long as either the existing concession contracts or the existing distribution licences.

The figure of the SNGN supplier was created. Its regulated activity consists of buying and selling natural gas in the framework of the management of long-term take-or-pay supply contracts entered into prior to the publication of Directive no. 2003/55/EC of 26 June 2003 of the European Parliament and Council.

This activity is unbundled from all other entities that operate in the framework of the SNGN in legal, organisational and decision-making terms.

On 31 December 2007, the shareholder structure of the retail last report suppliers was identical to that of the distribution system operators. Each of the new companies created by law (companies with more than 100,000 customers) is 100% owned by the respective distribution system operator. Supplier switching logistics operator

The supplier switching logistics operator performs functions in the framework of the supplier switching process management. It manages metering equipment and the collection of data locally or remotely.

This activity is unbundled from all other entities that operate in the framework of the SNGN in legal, organisational and decision-making terms.

The SNGN and the National Electricity System (SEN) share the same supplier switching logistics operator, which is subject to regulation.

The creation of this operator also depends on the complementary legislation provided for in Decree-Law no. 140/2006 of 26 July. In the transition period, awaiting creation of this new operator, the management of the supplier switching process is the responsibility of the transmission system operator.

4.2 COMPETITION

4.2.1 CHARACTERISATION OF THE WHOLESALE NATURAL GAS MARKET

Supply of natural gas to the Portuguese market is undertaken through long-term contracts, the amounts for which are negotiated on the basis of the vertically integrated system that existed until the process of liberalisation of the sector began.

The Portuguese wholesale natural gas market in 2007 thus amounted to nothing more than the supply of natural gas from traditional and previously defined sources. The main suppliers of natural gas are Algeria and Nigeria, through long-term take-or-pay contracts.

However, the legal framework for the sector, i.e. that created by the laws published during 2006, has since established both the unbundling of activities and the operation of the sector on a market-driven basis. Hence, the take-or-pay supply contracts are subject to a regime that allows any excess quantities to be placed on the market through transparent mechanisms, notably through auctions of excess quantities of natural gas.

Although the legal and regulatory provisions were created in 2007, the first auction will only take place in the final quarter of 2008.

4.2.2 CHARACTERISATION OF THE RETAIL NATURAL GAS MARKET

Until 2006 the organisation of the Portuguese natural gas sector was that of a vertically integrated monopoly. Customers were not free to choose their supplier.

Decree-Law no. 140/2006 of 26 July 2006, in complementing Decree-Law no. 30/2006, changed this situation and imposed the unbundling of activities along the natural gas value chain. It also defined the legal regimes applicable to these activities, including the legal bases for the concessions.

Bearing in mind the timetable for opening up the market as defined by law, in 2007 the retail market consisted only of the supply of natural gas under the application of regulated tariffs. Indeed, only the standard regime power plants were considered eligible to choose their natural gas supplier. All other customers were supplied on a regulated supply basis, with application of the respective tariffs.

The three largest natural gas consumers are the following power plants:

- Tapada do Outeiro, combined cycle, 3x330 MW.
- Ribatejo thermoelectric plant (TER), 3x392 MW.
- Carregado, single-cycle , 2x125 MW.

Distribution of natural gas by different types of consumer is dealt with in Section 5.2.1.

NATURAL GAS RETAIL PRICES IN 2007

In 2007 prices paid by natural gas end users continued to be approved by the Ministry for the Economy and Innovation, based on proposals submitted by the concession and licence holders.

The End User Sales tariffs are made up of the following tariffs:

- The End User Sales tariffs of the wholesale last resort supplier.
  - Tariff A
  - Tariff B
  - Tariff A+B
  - Carris and STCP Tariff
- The End User Sales tariffs of the retail last resort suppliers for annual supplies of more than 10,000 m^3.
  - Base Tariffs
  - Tariffs A (last resort retailers)
  - Cogeneration Tariffs
- The End User Sales tariffs of the retail last resort suppliers for annual supplies of less than 10,000 m^3.

The End User Sales tariffs practised by last resort retailers are not identical across the country.

The last resort wholesaler is the licence holder for last resort supply (Transgás) that is obliged to guarantee supply of natural gas to the last resort retailers and customers consuming 2 million m^3 (n) of natural gas or more that do not exercise their right of eligibility.

The last resort retailers are the entities holding last resort supply licences (Beiragás, Dianagás, Dourogás, Duriensegás, Lisboagás, Lusitaniagás, Medigás, Portgás, Setgás and Tagusgás) that are obliged to guarantee natural gas supply to all customers consuming less than 2 million m^3 (n) within their respective concession or licence areas.

The gas prices practised in Portugal as from the 1 January 07 for the selected levels of consumption, as published by the Directorate General for Energy and Geology (DGEG), were:

Table 4-4 - Natural gas prices published by Eurostat

Consumer type (Eurostat)	Price (01.01.2007)
D1 (eur/GJ) with taxes	21,97
D2 (eur/GJ) with taxes	18,63
I2 (eur/GJ) without VAT	10,16
I3-1 (eur/GJ) without VAT	7,76
I4-1 (eur/GJ) without VAT	5,92
I4-2 (eur/GJ) without VAT	5,82

Source: DGGE, EUROSTAT

These prices have not yet been unbundled into their different components, as the market has not been totally liberalised and regulation covers only the infrastructure use tariffs, as mentioned above.

4.2.3 MEASURES FOR PROMOTING COMPETITION

Pursuant to the respective legal provisions, the Competition Authority must be notified of any business transaction that is classified or could be classified as an operation within the market concentration concept. This also applies to the natural gas sector. In such cases, the opinion issued by the Competition Authority must be prepared in the light of the legal obligations of cooperation and coordination with the regulatory body responsible for the sector. ERSE is, therefore, called upon to issue a formal opinion in all such notified cases involving entities from the energy sector.

In 2007 the Competition Authority issued one decision regarding operations by entities involved in the natural gas sector, calling on ERSE to issue respective the opinion reports. The aforementioned decision can be consulted on the Competition Authority's website.

The only operation in the natural gas sector on which the Competition Authority issued a decision in 2007 had to do with the transfer of assets from the transmission system operator to one of the distribution system operators. The context of this transfer was the need to re-allocate the sector's assets with a view to implementing the unbundling of activities defined in the Directive and by the legal provisions in force.

5 SECURITY OF SUPPLY

5.1 ELECTRICITY

5.1.1 BRIEF CHARACTERISATION OF 2007

Electricity consumption in 2007 increased at the same rate as in 2006, growing by 1.8% (2.4%, after correction for temperature and the number of working days).

In 2007 hydroelectric energy capability was below average for the 4th year running, registering a hydraulicity index of 0.76. Hydroelectric power plants supplied 19% for consumption, while thermal power stations covered 46%. Deliveries by special regime generators to the grid continued to grow significantly, reaching 20% of national consumption.

With MIBEL in operation since 1 July, the exchanges with Spain were the highest ever, with the import balance rising 38%, and supplying 15% of electricity consumed.

After full liberalisation of the market, regulated tariff consumption accounted for approximately 88% of total consumption, as opposed to 85% in 2006.

In 2007 there were no significant changes in the installed capacity in thermal power stations (apart from 32 MW excluded in the Tunes plant) or hydropower stations. Installed capacity for SRG was 453 MW, corresponding to 63 MW installed by thermal generators (cogenerators), 3 MW by hydro generators, 377 MW by wind generators and 10 MW by photovoltaic generators.

In the National Transmission Network, attention is drawn to the commissioning of the Bodiosa – Paraimo (operated at 220 kV), Batalha - Pego and Sines – Portimão (operated at 150 kV) 400 kV lines, and the Castelo Branco - Ferro and Fanhões – Trajouce 220 kV lines. The new substations of Penela, Castelo Branco, Trafaria and Alqueva and the Pedralva switching station also entered into operation.

In terms of quality of service, the Equivalent Interruption Time remained below 1 minute for the third consecutive year.

Breakdown of electricity generation by energy source in 2003 to 2007 period is given in Table 5-1.

Table 5-1 - Breakdown of generation

Gas	21%	20%	24%	21%	14%
Import balance	15%	11%	14%	14%	6%
Fuel oil	2%	3%	10%	4%	6%
Coal	23%	28%	30%	31%	31%
Hydro	19%	20%	9%	20%	35%
Special Regime Generation	20%	18%	13%	10%	8%

Source: 2007 data supplied by REN (2007 Technical Data)

Table 5-2 shows how consumption needs were met by the respective generation types.

Table 5-2 - Consumption supply

	2007 (GWh)	2006 (GWh)	Change (%)
HYDRO POWER GENERATION	9 522	10 204	-7
THERMAL POWER GENERATION	23 424	25 478	-8
SPEC. REGIME PRODUCTION	10 156	8 754	16
IMPORT BALANCE	7 488	5 441	38
HYDROPOWER PUMPING	540	703	-23
TOTAL CONSUMPTION	50 050	49 174	1,8

Source: 2007 data supplied by REN (2007 Technical Data)

The maximum power requested from the public grid – i.e. 9110 MW – occurred on the 18 December, exceeding by approximately 300 MW the previous maximum recorded in January 2006.

The trend in maximum annual power is shown in Table 5-3.

Table 5-3 - Maximum annual power

Year	Day	Power (MW)	Variation (%)
2007	18-Dec	9 110	3,48
2006	30-Jan	8 804	3,24
2005	27-Jan	8 528	3,38
2004	09-Dec	8 249	2,52
2003	15-Jan	8 046	8,82
2002	12-Dec	7 394	-0,96
2001	17-Dec	7 466	8,36
2000	25-Jan	6 890	4,05

Source: 2007 data supplied by REN (2007 Technical Data)

The trend in maximum power requested from the grid, as forecast by transmission system operator for the coming years, is shown in Table 5-4.

Table 5-4 - Trend in maximum power

Year	Power (MW)	Change versus 2007 (%)
2009	9.769	7,2
2011	10.711	17,6
2014	12.119	33,0

Source: REN (RNT Development and Investment Plan 2009-2014, Public Consultation)

The development in terms of installed power at the end of each year is shown in Table 5-5.

Table 5-5 - Existing power plants

	2007 (MW)	2006 (MW)	Change (MW)
HYDROPOWER PLANTS	4.582	4.582	0
THERMAL POWER PLANTS	5.820	5.852	-32
Coal	1.776	1.776	0
Fuel oil	1.476	1.476	0
Fuel oil / Natural gas	236	236	0
Diesel	165	197	-32
Natural gas	2.166	2.166	0
SPECIAL REGIME INSTALLED CAPACITY	3.639	3.187	453
Thermal generators	1.362	1.299	63
Hydro generators	373	370	3
Wind generators	1894	1517	377
Photovoltaic generators	11	1	10
TOTAL	14.041	13.621	420

Source: REN (2007 Technical Data)

The trend in installed capacity and maximum requested power is shown in Table 5-6.

Table 5-6 - Capacity margin

	2007 (MW)	2006 (MW)	2005 (MW)	2004 (MW)	2000 (MW)	2007/2000
Total installed power	14 041	13 621	12 821	11 708	9 947	1,41
Thermal	5 820	5 852	5 851	5 460	4 855	1,20
Hydro	4 582	4 582	4 582	4 386	4 184	1,10
Special regime	3 639	3 187	2 388	1 862	908	4,01
Maximum annual power	9 110	8 804	8 528	8 249	6 890	1,32
Capacity margin	4 931	4 817	4 293	3 459	3 057	1,61
	(35%)	(35%)	(33%)	(30%)	(31%)	

Source: 2007 data supplied by REN (2007 Technical Data)

5.1.2 SYSTEMS PLANNING AND INVESTMENT IN GENERATION

There were no amendments to the legal framework for system infrastructure planning and investment in generation approved in 2006.

NEW INVESTMENT IN GENERATION

As regards planned new investment in standard regime generation, in addition to the licences issued early in the year for the construction of two 400 MW TGCC thermal generator groups in Figueira da Foz and two more groups using the same technology and identical capacity in Pego, the DGEG issued a favourable opinion for the construction of two more sets of two TGCC groups in Figueira da Foz and Sines.

The increase in the power of three hydropower plants – two on the River Douro (Picote II and Bemposta II), adding 240 MW and 190 MW respectively to the system, and one at the Alqueva hydropower plant, adding 240 MW – is currently in execution. Completion of these power reinforcements is scheduled for 2011.

Likewise planned is the entry into operation of the Baixo Sabor hydropower plant with 140 MW by 2013 and capacity increases in the Salamonde 2 and Venda Nova 3 plants of 85 MW and 440 MW respectively, in 2014.

Table 5-7 shows the trend forecasts for Special Regime Generation.

Table 5-7 - Trend forecast for SRG

	2010
Wind	5.150
Hydro	(*)
Biomass	250
Solar	150
Waves	250
Biogas	100
Cogeneration	2.000

(*)Note: The target set by the Government for 2010 includes all hydropower generation (SRG and standard regime generation), totalling 5,575 MW; it is therefore not possible to give a specific figure for SRG hydropower.

Source: "Energia e Alterações Climáticas" (Energy and Climate Change), Ministry for the Economy and Innovation.
"Programa Nacional para as Alterações Climáticas" (National Programme for Climate Change), Ministry for the Environment, Regional Planning and Regional Development and Ministry of the Economy and Innovation.

In addition to investment subsidies, special regime generation also benefits from a guaranteed price for the entire amount of energy it generates. Established by the Government, this price depends on technology and on the profile of energy delivered to the grid. This price is based on the calculation of avoided costs, including costs avoided with CO_2 emissions. The cost[17] resulting from this incentive is supported by the Global Use of System tariff.

The forecast development in the body of power plants also includes the declassification of the Barreiro plant (56 MW) in 2010, the plants in Tunes (165 MW) and Carregado (710 MW) in 2011 and the Setúbal plant (980 MW) in 2013.

[17] Calculated as the gap between the price paid to special regime generation and the average price paid in the market or by bilateral contract.

5.2 GAS

5.2.1 BRIEF CHARACTERISATION OF 2007

Demand for natural gas grew by 6.54% in 2007 as compared to 2006 and by 2.09% in comparison to 2005. The demand for natural gas in the electricity market in 2007 increased by 6.47% over 2006, though it did not attain the level reached in 2005. The year 2007 saw more expressive growth in the demand for natural gas in the large customer and regional distributor segments.

The business activity in 2005, 2006 and 2007 is illustrated in the following table:

Table 5-8 - Natural gas demand - business activity

	2007	2006	2005	Change 2007-2006 (%)	Change 2007-2005 (%)
Electricity market (TWh)	21,4	20,1	23,3	6,47	-13,73
Large-scale industry (TWh)	18,7	17,7	16,9	5,65	4,73
Regional distribution (TWh)	8,8	8,1	7,7	8,64	14,08
Total demand (TWh)	48,9	45,9	47,9	6,54	-4,18

Source: REN Gasodutos

Table 5-9 summarises the supply of natural gas to Portugal in 2005, 2006 and 2007, breaking it down into quantities for reserved consumption, storage and the international market.

Table 5-9 - Supplies of natural gas

	2007	2006	2005	Change 2007-2006 (%)
Import [bcm]	4,04	3,92	4,19	2,30
Consumption [bcm]	4,10	3,86	4,02	6,45
Storage [bcm]	-0,06	0,17	0,06	-141,18
International market [bcm]	0,0	0,012	0,006	-100,00

Source: REN Gasodutos

5.2.2 SECURITY OF SUPPLY IN THE NATIONAL NATURAL GAS SYSTEM

Chapter XI of Decree Law no. 140/2006 of 26 June establishes promotion of the conditions of guarantee and security of supply to the national natural gas system through the following measures:

- Establishment and maintenance of security reserves.
- Diversification of natural gas supply sources.
- Existence of long-term natural gas supply contracts.
- Development of interruptible demand.
- Development of the cooperation and mechanisms of solidarity with operators in neighbouring countries.
- Promotion of energy efficiency.
- Definition and application of emergency measures.

5.2.2.1 SECURITY RESERVES

Market agents operating in the national territory are obliged to establish and maintain security reserves of no less than 15 days of uninterruptible consumption by the standard regime electricity generators and 20 days of uninterruptible consumption of all other kinds.

The security reserves are created preferentially in natural gas storage facilities in Portugal, except where a bilateral agreement exists that provides for the possibility of establishing reserves in other countries. Such a situation would require express authorisation from the minister responsible for energy.

The security reserves may include natural gas held in the underground storage facilities, the LNG terminal and on gas tankers en route to LNG terminals in Portugal with a journey time of nine days.

5.2.2.2 UNDERGROUND STORAGE OF NATURAL GAS

In simplified terms the natural gas underground storage facility consists of four underground caverns built in natural saline rock formations, using a single ground-level station. The construction of two more underground caverns is planned in the future.

Table 5-10 shows the useful storage capacity of the storage caves at the Carriço underground storage infrastructure – as well as its natural gas injection capacity into the RNTGN, in 2007.

Table 5-10 - Useful storage capacity and capacity of injection into RNTGN

Underground Cavern	Storage capacity [m^3]	Capacity of injection into RNTGN [m^3(n)/h]
TGC-3	530 000	300 000
TGC-5	470 000	
TGC-1S	360 000	
TGC-4 (under construction)	550 000	

Note: TGC-1S is owned by Transgás Armazenagem, while all other caverns belong to REN Armazenagem.

5.2.2.3 LNG TERMINAL

The need to have a secure natural gas supply and to diversify supply sources led to a decision, in the late 1990s, to build an LNG terminal in Sines. This infrastructure came into operation in early 2004. It has a maximum LNG storage capacity of 240000 m^3_{GNL}, a nominal capacity of injection into the RNTGN of 600,000 m^3(n)/h and a maximum injection capacity of 900,000 m^3(n)/h.

Traffic at the Sines LNG Terminal in terms of gas tankers unloaded in 2006 and 2007 is shown in Table 5-11.

Table 5-11 - LNG terminal traffic – unloading of LNG

	2007	2006	Variation (%)
Total number of LNG tankers received	35	28	25
Total LNG unloaded [Mm^3_{GNL}]	4,6	3,46	33

Source: REN Atlântico

The number of gas tankers that REN Atlântico received and unloaded in 2007 represented an increase of 25% over 2006. This increase also brought a 33% rise in the total amount of LNG unloaded at the terminal, again as compared with 2006.

5.2.2.4 IMPORT AND DIVERSIFICATION OF SUPPLY SOURCES

The amount of natural gas that entered the RNTGN in 2007 was 4.3 bcm (51.3 TWh), of which 0.2 bcm (1.9 TWh) was in transit. The maximum importing capacity of natural gas by gas pipeline is 8.95 bcm, which shows that capacity is currently available for rapid development of the sector.

In 2007 the natural gas entered the transmission network at the Sines LNG terminal connection point (36.7%) and the international connection point at Campo Maior (63.3%). The natural gas processed in Sines and conveyed through the Campo Maior interconnection comes mostly from Nigeria and Algeria respectively, on the basis of existing-long term natural gas supply contracts.

Table 5-12 hows the RNTGN natural gas balance in 2007 and 2006.

Table 5-12 - RNTGN gas balance

	2007	2006	Variation (%)
GAS ENTERING (TWh)	**51,1**	**51,7**	-1,1
Interconnections (TWh)	18,3	27,8	-34,2
▪ Domestic Market	16,4	23,4	-29,9
▪ Transit	1,9	4,4	-56,8
LNG Terminal (TWh)	31,5	23,1	36,4
Storage – Extraction (TWh)	1,3	0,8	62,5
GAS LEAVING (TWh)	**51,7**	**51,9**	-0,4
GRMS (TWh)	48,9	45,9	6,5
Storage – Injection (TWh)	0,9	1,5	-40,0
Interconnections [TWh]	1,9	4,55	-58,2
▪ International Market	0	0,15	-100,0
▪ Transit	1,9	4,4	-56,8

Source: REN Gasodutos

5.2.2.5 LONG-TERM SUPPLY CONTRACTS

Transgás, SA, holder of the take-or-pay contracts, was renamed Galp Gás Natural, SA in February 2007. This means that Galp Gás Natural, SA, a Galp Energia group company, is now the holder of the long-term take-or-pay natural gas supply contracts.

The first supply contract was signed in late 1993 by Sonatrach and Transgás. In addition to this contract, there are also three long-term LNG supply contracts with Nigeria. In 2007 three of these contracts were in force.

The main features of these supply contracts are summarised below.

CONTRACT FOR THE PURCHASE OF NATURAL GAS FROM SONATRACH

Pursuant to this contract, Sonatrach undertakes to supply natural gas to Transgás – now called Galp Gás Natural. In turn Galp Gás Natural undertakes to acquire and pay for these quantities – used or not (take-or-pay). The contractual amounts Sonatrach undertakes to supply, known as the contractual annual quantity (QAC)[18], are as follows:

- 1.600.000.000 m^3 in 1998.
- 1.900.000.000 m^3 in 1999.
- 2,100,000,000 m^3 in 2000.
- 2,500,000,000 m^3 from 2001 to 2020 (last year of contract).

CONTRACTS FOR THE PURCHASE OF LIQUEFIED NATURAL GAS FROM NLNG

Three contracts for the acquisition of LNG have been signed with Nigerian LNG, Limited (NLNG): NLNG I, NLNG II and NLNG Plus. These contracts have been signed for a period of 20 years, with a 6-year grace period.

The amount of LNG contracted under NLNG I is 0.42 bcm[19] and supply began in 2000. Deliveries may be made at Huelva, Cartagena or Sines.

The amount of LNG contracted under NLNG II is 1 bcm and supply began in 2002.

The amount of LNG contracted under NLNG Plus is 2 bcm and supply began in 2006. Deliveries can be made at any Iberian terminal along the Mediterranean Coast, or at Sines.

[18] For a calorific value ranging from 9,150 to 9,600 kcal/cm^3.
[19] 1 bcm (billion cubic meters) = 10^9 m^3.

5.2.2.6 DEFINITION AND IMPLEMENTATION OF EMERGENCY MEASURES

In the event of a disruption to supply, the minister responsible for the area of energy may put temporary emergency measures in place, determining the use of the security reserves and measures to lessen demand.

The European Commission is informed of the adoption of such emergency measures, which, wherever possible or fitting, should involve the participation of the market operators and agents.

6 PUBLIC SERVICE

6.1 PUBLIC SERVICE OBLIGATIONS

Pursuant to the legislation and regulations in force, the various agents in the electricity and natural gas sectors must carry out their activity in observance of the public service obligations established in compliance with Directive 2003/54/EC and Directive 2003/55/EC, both of 26 June.

In the aforementioned Community directives, consumer protection is linked to the public service obligations and a series of measures aimed at safeguarding the rights and interests of the consumer is defined in Annex A to these directives.

Portuguese law expressly enshrines consumer protection in the list of public service obligations, both for the electricity sector (Decree-Law no. 29/2006 of 15 February) and the natural gas sector (Decree-Law no. 30/2006 of 15 February).

In the specific area of consumer protection in 2007 attention is drawn to the publication of Decree-Law no. 100/2007 of 2 April, which introduced certain changes to the system governing the deposits paid by consumers in the context of the supply of essential public services established in Decree-Law no. 195/99 of 8 June.

The feature of this system is that, in the case of domestic consumers, the deposit can only be demanded when the supply of an essential service such as electricity or natural gas is re-established following an interruption of supply due to a breach of contract by the customer. This means that deposits held by the service providers as contractual guarantees should be paid back to the consumers.

The deposit reimbursements undertaken in 2000 by the regulatory bodies for the services in question did not, however, lead to the reimbursement of all of the amounts paid as deposits. Consequently, Decree-Law no. 100/2007 reopened the deposit reimbursement process, creating a use for those deposits which are not claimed by the consumers within a stipulated period. That use is the Directorate General for the Consumer, a body responsible for helping to draft, define and implement the national consumer protection policy.

Pursuant to the aforementioned law, ERSE approved the conditions and timetable for compiling the lists of electricity and natural gas consumers to whom the deposit was to be returned. On the basis of these lists, which have been duly published, consumers can claim reimbursement of the deposit. ERSE also defined the procedures to be adopted with a view to depositing unclaimed deposits in the sight account of the Directorate General for the Consumer. To this end, ERSE Order no. 18837/2007 of 22 August was published. Steps were also taken to ensure the periodic public disclosure of information on the course of the process, which is expected to be completed by the end of the first quarter of 2008.

6.1.1 ELECTRICITY SECTOR

The regulatory revision that took place in the electricity sector in 2007 included some alterations that had an impact on public service obligations. Thus, the Commercial Relations Regulations, as revised by ERSE Order no. 17744/200/ of 10 August, consolidated and complemented aspects of commercial relations emerging in the electricity sector with a public service profile. The list of public service obligations as defined in the 2006 legislation should be noted:

- Security, regularity and quality of supply.
- Guaranteed universal provision of services.
- Guaranteed connection of all customers to the grids.
- Consumer protection, with particular reference to tariffs and prices.
- Promotion of energy efficiency, environmental protection and rational use of renewable and endogenous resources.
- Convergence of the National Electricity System, in terms of solidarity and co-operation with the electricity systems of the Autonomous Regions of the Azores and Madeira.

The 2007 version of the Commercial Relations Regulations placed greater importance still on the question of the labelling of electricity, reinforcing the obligations in this field. Consequently, electricity bills and other documentation, accompanying bills or not, issued by all suppliers must clearly and simply specify the following information:

a) Relative contribution from different energy sources to the total electricity acquired by the supplier in the previous year.

b) The environmental impact of the electricity supplied in the previous year, identifying in particular the production of radioactive waste and CO_2, SO_2 and NOx emissions.

c) The consultation sources on which the information given to the public on the environmental impact of the generation of the electricity supplied in the previous year is based.

The data to be made available to customers must include information on the environmental consequences, at the generation level, of the electricity they use, at least in terms of the CO_2 emissions and radioactive waste. All information provided must be forwarded to ERSE by 31 March of the following year, including the reference dates and the resources used.

For their part, recalling that, in the electricity sector, in addition to the public service obligations, the system operators and last resort suppliers are also subject to universal service obligations and that, pursuant to that concept, prior to the obligation of supply, there is an obligation to connect to the system the installations of all those customers that require it. ERSE Order no. 12741/2007 of 21 June, should

also be noted; it approved the commercial conditions for connection to the electricity transmission and distribution networks. The methodologies approved in this order are based on rules established in the Commercial Relations Regulations, of which the following are the most important:

- Definition of maximum lengths for building elements of exclusive-use connections, based on which the costs will be shared with the remaining grid connection applicants and electricity consumers.
- The costs for the expansion of LV networks are recovered by the system operator through the use of network tariffs and are not borne by the connection applicant at the time of connection to the grid.

These two aspects are mentioned here as examples of the changes made to advance and facilitate access to the grid for connection purposes and, consequently, for the supply of electricity, strengthening the universality nature conferred upon it.

The electricity supply obligations imposed on the electricity system operators and the last resort suppliers mean that supply interruptions and, in particular, the reasons potentially used to justify such interruptions, are regarded as exceptional situations and are duly categorised by type. In most cases, supply interruptions require an explanatory advance warning, sent a minimum time before the interruption is scheduled.

Failure to pay electricity bills is one possible reason for interrupting supply, in the case of customers of last resort suppliers. In the case of other suppliers, who take responsibility on behalf of their customers for the payment of the costs involved in using the system, failure to pay bills may lead to termination of the supply agreement. In this situation, the electricity supply may be interrupted if the customer of a given supplier, after termination of the supply contract, does not sign a new contract with a different supplier, whether a last resort supplier or not, after the established waiting period for switching supplier has elapsed.

In 2007, in a universe of approximately 6 million customers, 343,975 interruptions of the electricity supply were recorded in mainland Portugal due to failure to pay bills within the contractual deadline. Once the outstanding bills have been settled, suppliers are obliged to re-establish electricity supply within the deadlines defined in the regulations in force.

6.1.2 NATURAL GAS SECTOR

Two particular references come to mind in the context of the public service obligations applicable to the natural gas sector in 2007.

The first is the incorporation of companies legally independent of the distribution system operators, to which last resort supplier licences have been awarded. This development took place in late June and throughout the month of July 2007. This legal unbundling of activities had been determined by the

national legislation published in 2006, on the basis of Directive 2003/55/EC, making such a move obligatory for companies with 100,000 customers or more.

The second aspect was the decision by ERSE which established the maximum amounts for each system operator or infrastructure operator in relation to the respective environmental performance promotion plans. These plans are designed to motivate the operator to implement measures, preferably voluntarily, to improve its environmental performance.

6.2 GENERAL TERMS AND CONDITIONS OF SUPPLY CONTRACTS

6.2.1 ELECTRICITY SECTOR

All electricity suppliers are subject to the rules established in Annex A of Directive 2003/54/EC concerning the content of the supply contract. The directive has been fully transposed into Portuguese law and regulations. In particular, these determine that contractual terms and conditions must be equitable and that consumers must know them prior to signing or confirming a contract. Furthermore they must be written in plain language that can be understood by all. Suppliers shall also directly provide prior and well-founded information to their customers on any intention to amend the contractual terms and conditions in force and on all rights associated with the purported amendment.

In addition, according to the regulations currently governing the electricity sector, the Regulatory Authority must approve the minimum information that must be included in the supply contracts signed with the last resort suppliers. This replaces the approval of the general terms and conditions per se, as established in previous regulations.

The minimum information that must be included in the supply contracts to be signed in the context of public electricity systems has already been approved by an order issued by ERSE, published on 10 February 2006, following a proposal made by last resort suppliers and after consultation with consumer associations. No amendment or addendum to the existing situation has been registered in the meantime.

6.2.2 NATURAL GAS SECTOR

In the natural gas sector Annex A of Directive 2003/55/EC also establishes a number of consumer protection measures, determining a similar set of information that must be specified in natural gas supply contracts. The content of the aforementioned Annex A are also reflected in the most recent Portuguese legislation and regulations relating to the natural gas sector.

In the case of contracts to be signed by last resort retailers and customers whose annual natural gas consumption is 10,000 m^3 or less, these regulations also establish that the regulator must approve the

general contractual terms and conditions to be included in such supply contracts. This measure proved to be more in line with the current phase of development of the natural gas sector in Portugal. The market is due to be opened to this customer segment as from January 2010.

The general terms and conditions to be included in the natural gas supply contracts between last resort retailers and customers with an annual consumption of 10,000 m^3 or less were approved by ERSE in 2007, following a proposal submitted by the last resort suppliers and after consulting the consumer associations, leading to the publication of Order no. 14553/2007.

6.3 LEGISLATIVE PROVISIONS REGARDING END USER TARIFFS

ELECTRICITY

Today every consumer is free to choose its electricity supplier. Likewise there is a last resort supplier who charges its customers the End User tariffs calculated by adding to grid access tariffs (to be paid by all consumers) the Supply tariff and the Energy tariff of the last resort supplier. The last two tariffs are calculated so as to recover, on the one hand, the marketing costs of the last resort supplier and, on the other hand, the costs incurred in buying electricity in the market to supply its customers.

ERSE defines and publishes, by 15 December each year, the End User tariffs to be paid by the customers of the last resort suppliers, as well as the grid access tariffs to be paid by all customers. Pricing of annual tariffs follows the principle of tariff additivity, through which it can be assured that all customers pay the same for access to the grids, irrespective of their commercial relationship. Payment for grid access will only be differentiated for electrical characteristics' profiles related to electricity consumption or grid use.

As regards the End User tariffs for the LV customers of last resort suppliers, the additive mechanism for defining tariffs, the calculation procedures for which are described in the Tariff Regulations that are issued by ERSE, was subject to an annual variation limit imposed by law up until the end of 2005, in accordance with Decree-Law no. 187/95 of 27 July. In each year, the tariff increase may not exceed the inflation rate expected for that year.

Decree-Law no. 29/2006, of 15 February 2006, revoked this provision as from the 1 January 2007.

On 18 December 2006 Decree-Law no. 237-B/2006 was published, which approves the mechanisms for recovering the amounts relating to tariff deficits and tariff adjustments and establishes the extra restrictions on regulated StLV tariffs for 2007.

This Decree-Law establishes that "(…) provisionally, the tariffs for 2007, applicable to standard low voltage customers, may not increase by more than 6 percent versus the tariffs in force in 2006."

Furthermore it determines that the tariff deficit resulting from the application of the end user tariff in 2006 and 2007, plus the respective financial charges, shall be reflected in the Global Use of System tariff for low voltage and recovered in constant instalments over a period of 10 years, as from the 1 January 2008. In these circumstances price restrictions applied to LV in 2006 and to StLV in 2007 generated a tariff deficit that will be paid over the next 10 years, by way of revenue in constant instalments for those supplies. It is thus guaranteed that there is no cross-subsidisation between customers of different types of voltage, or different types of supply.

It should be noted that no restrictions on tariff prices are planned for the period after the 1 January 2008.

With a view to adapting the regulation of the electricity sector to the new legal framework, i.e. to Decree-Law no. 264/2007 of 24 July, and the challenge of the creation of MIBEL, ERSE launched a regulatory revision that was concluded in June 2007 with the approval of the revision of the electricity sector regulations (Order no. 17774-A/2007 of 10 August), including the Tariff Regulations. The provisions established in the Tariff Regulations consolidate both the regulation of the electricity transmission and distribution activities and the integration of the Iberian Electricity market within the framework of the aforementioned legislation now in force.

The year 2007 also saw publication of the following important legislative amendments:

- Decree-Law no. 199/2006 of 18 May, which amended Decree-Law no. 240/2004 of 27 December, defining the conditions for the termination of the PPAs and the establishment of compensation measures for the position of each party in those contracts (CBMCs).
- Ministerial Order no. 782/2007 of 19 July, which recognised the managing body for MIBEL daily and intraday markets and established the special rules and obligations for the purchase of energy by the last resort supplier.
- Decree-Law no. 226-A/2007 of 31 May, which approved the new regime for the use of water resources. This law established specific rules on the allocation of rights of use for the water resources+ to the companies owning power plants as well as on the payments by the latter for the transfer of the rights of use from the transmission system operator to the power plant owning companies. Part of the economic/financial balance relating to the rights of use of the public waterways domain allocated to hydroelectric power stations was aimed at amortising the tariff deficits for 2006 and 2007, the recovery mechanisms for which are defined in Decree-Law no. 237-B/2006 of 18 December.
- An Order from the Minister of the Economy and Innovation on the amortisation of the tariff deficits for 2006 and 2007.

Following the launch of the organised market on 1 July 2007, Decree-Law no. 264/2007 determined the extraordinary revision of electricity tariffs in 2007. Thus, in August 2007, ERSE published new tariffs for

the September – December 2007 period, implementing the main regulatory and legislative modifications up to that date.

NATURAL GAS

Until 2006 the structure of the natural gas sector in Portugal was that of a vertically integrated monopoly and customers did not have the option of choosing their supplier. End user tariffs for the sale of natural gas to household customers (up to 10,000 m^3(n)/year) were approved by the Ministry for the Economy and Innovation. For consumption in excess of 10,000 m^3(n)/year, tariffs were negotiated between the holders of concessions and licences and their respective customers.

Decree-Law no. 140/2006 of 26 July 2006, in complementing Decree-Law no. 30/2006, changed this situation and imposed the unbundling of activities along the natural gas value chain. It also defined the legal regimes applicable to these activities, including the legal bases for the concessions.

The same Decree-Law laid down the provisions governing the opening of the market, granting the right to choose suppliers, to (i) standard regime electricity generators, as from 1 January 2007, (ii) customers whose annual consumption is 1 million normal cubic meters or more, as from 1 January 2008, (iii) customers whose annual consumption is 10,000 normal cubic meters or more, as from 1 January 2009, and lastly (iv), to all remaining customers, as from 1 January 2010.

In accordance with the published legislation, 2007 was the year in which ERSE began to establish tariffs for each regulated activity in the natural gas sector.

In the first gas year, 2007-2008, the ERSE regulation activity covered tariffs for Transmission Use of Network, Use of LNG Reception, Storage and Regasification Terminal and Use of Underground Storage.

In 2007 the end user tariff prices continued to be approved by the Ministry of the Economy and Innovation, based on proposals submitted by the concession and licence holders. In the first half of 2008 the responsibility for such approval will be transferred to ERSE.

In the 2008-2009 gas year ERSE will extend its regulation to the Natural Gas Distribution, Natural Gas Supply and Natural Gas Buying and Selling activities, establishing the End User tariffs.