# Table of contents

1 Foreword 3

2 Main developments in the electricity and gas markets 5
   2.1 Main developments in electricity markets in 2012 15
   2.2 Main developments in gas markets in 2012 18

3 The electricity market 21
   3.1 Network regulation 21
      3.1.1 Unbundling 21
      3.1.2 Technical functioning 24
      3.1.3 Network tariffs for connection and access 29
      3.1.4 Cross-border issues 30
      3.1.5 Compliance 37
   3.2 Promoting Competition 38
      3.2.1 Wholesale markets 38
      3.2.2 Retail market 50
   3.3 Security of supply (if and in so far as NRA is competent authority) 64
      3.3.1 Monitoring balance of supply and demand 64
      3.3.2 Monitoring investment in generation capacities related SoS 66
      3.3.3 Measures to cover peak demand or shortfalls of suppliers 71

4 The gas market 72
   4.1 Network regulation 72
      4.1.1 Unbundling 72
      4.1.2 Technical functioning 78
      4.1.3 Network and LNG tariffs for connection and access 84
      4.1.4 Cross-border issues 85
4.1.5 Compliance
4.2 Promoting Competition
  4.2.1 Wholesale Markets
  4.2.2 Retail prices
4.3 Security of supply
  4.3.1 Monitoring balance of supply and demand
  4.3.2 Expected future demand and available supplies as well as envisaged additional capacity
  4.3.3 Measures to cover peak demand or shortfalls of suppliers
5 Consumer protection and dispute settlement
  5.1 Consumer protection
  5.2 Dispute settlement
1 FOREWORD

Europe’s energy sector today is dealing with a great amount of challenges: competition, liberalisation, renewable, infrastructures, energy efficiency and smart technologies, among others.

2012 has been a year of intense activity in the context of European energy regulation and, at national level, in the process of implementation of the legal provisions set forth by the Third Energy Package.


Moreover, the first ACER/CEER Joint Monitoring Report was published at the end of the year in which both bodies assess wholesale and retail market developments across the EU in 2011, as well as consumer protection and empowerment issues.

All these publications complement each other and provide the necessary basis to go forward successfully with the Internal Market for Energy.

Completing the Internal Energy Market is one of the European Council’s top priorities, ensuring that Europe’s energy market bring benefit to all players and consumers, with greater efficiencies in production and supplies. However, despite the advances made in recent years, it is yet not operating in the most efficient and flexible way.

Moreover, bringing the consumers on board is also essential to make the market work. Consumers should be encouraged to be more active in the market and take control of their own energy consumption. In 2012, CEER took the initiative to develop a vision that puts consumers first. The 2020 Vision for Europe Energy Customers was endorsed by relevant stakeholders and received the support of the London Forum, considering that making the demand-side more pro-active will apply in the benefit of competition, security of supply and sustainability. Such broad endorsement is most encouraging, not least when set against a backdrop of the EC’s Consumer Market Scoreboard which shows low consumers satisfaction in energy markets, and the own CEER-ACER market monitoring report which shows that energy markets are not yet delivering expected benefits for consumers.

The Spanish energy market has made significant progress to adapt to this new legal framework. The transposition process was completed by the Royal Decree-Law 13/2012 which has granted new powers and reinforced duties to CNE on unbundling, consumers protection, the approval of methodologies concerning transmission and distribution access.
tariffs, balancing services, access to interconnection infrastructures, capacity allocation and congestion management procedures, enforcement powers and imposition of penalties.

On the other hand, the permanent commitment of CNE with the European dimension has been acknowledged by a specific mandate, included in the Royal Decree-Law 13/2012, to promote the development of competitive regional markets and remove obstacles to the cross border energy trade which will be, without a doubt, very beneficial for further progress in the creation of the EU Internal Energy Market.

At national level, we have to highlight that, since the beginning of 2012, the Government has taken several remarkable measures to solve the problem of the electricity tariff deficit. The purpose of these measures is to reduce system costs and to increase system revenues. In the gas sector, in line with the South Gas Regional Initiative targets, it is especially noteworthy the impetus given to the creation of an Iberian gas hub by setting up, at the end of 2012, a working group. This group brings together all the stakeholders in order to advance in the removal of the existing barriers for the development of the aforementioned gas hub between Spain and Portugal.

The Spanish energy markets are in the midst of a deep transformation and the recent approval of Act 3/2013 creating the National Commission of Markets and Competition gives evidence for that. The objective of this Act is to merge, under a new body, the functions and powers entitled to promote competition and monitor well functioning of sectorial markets (among them the current Spanish Energy Commission).

Alberto Lafuente
President of CNE
2 MAIN DEVELOPMENTS IN THE ELECTRICITY AND GAS MARKETS

From CNE towards CNMC

On 5th June 2013, the Spanish Official Gazette (BOE) has published Act 3/2013, dated 4th June, on the creation of the National Commission of Markets and Competition (CNMC). The objective of this Act is to merge, under the new Commission, the functions and powers of the Spanish competition authority and other six independent bodies that were entitled to promote competition and monitor well functioning of certain markets (among them, the National Regulatory Authority on energy, Comisión Nacional de Energía). The purpose of the Act is to prevent duplicity and overlapping of competences, take advantage of the experience and knowledge acquired related to other regulated sectors and provide an integrated view of the regulatory activity.

Nevertheless, Act 3/2013 sets up that some specific tasks (which are defined as administrative work or activities with limited interest for the objectives of the new Commission) that were previously performed by the merging NRAs, shall now be assumed by the respective Ministries.

The National Commission of Markets and Competition (CNMC) is created as a public body with its own legal personality and full capacity to act, with the aim of ensuring well functioning, transparency and effective competition in every market or area of production. It is independent from the Spanish Government, and also from any public body or private agents of the market.

The Board of the National Commission of Markets and Competition is entitled to adopt the Commission’s decisions. The members of the Board can meet in plenary session or in chambers. There are two chambers: Competition Chamber and Regulatory Monitoring Chamber; each of them integrated by five commissioners. Four Departments have the responsibility of the preliminary investigations: Competition Department, Telecommunications Department, Energy Department and Transport & Postal Department.

Act 3/2013 provides that the Government shall approve the National Commission of Markets and Competition By-law and the Board of the Commission shall approve the internal working rules.
Transposition of the Third Energy Package

On 30 March 2012, the Spanish Government approved the Royal Decree-Law 13/2012 (hereinafter, “RDL”). Said RDL, as regards the Spanish energy sector, has adopted measures to contain the deviations produced by the mismatches between costs and revenues in the electricity and gas sector, and completes the transposition of provisions of the Third Energy Package into the Spanish legislation.

The new legal measures are aiming to:

- Correct the imbalance in the Spanish electricity system through a set of measures to resolve the current imbalance between cost of production and revenues in tariffs (tariff deficit) for 2012.

- Reduce costs in the electricity system so that access tariffs are sufficient to cover the cost of production of regulated activities and achieve a tariff/costs balance in the electricity system by 1 January 2013.

- Prevent the current development model of the gas sector from producing similar imbalances to those in the electricity sector. The large investments made in the gas sector in recent years and the decrease in demand have already created an imbalance between revenues and costs, albeit much lower than the existing imbalances in the electricity sector.


Regarding the electricity sector, the Royal Decree-Law transposes the unbundling provisions attributing CNE the duty to certificate and monitor the continuing compliance of transmission system operators with the requirements established in the abovementioned legal provisions. Concerning consumers’ protection, the concept of vulnerable consumer has been set up as well as certain measures to protect them; the competent public bodies, together with CNE, shall establish points of single contact to inform consumers about their rights and existing proceedings for solving disputes. Finally, the State Administration will be able to launch mechanisms on international cooperation with the aim of complying with legal requirements of Directive 2009/28/EC leading to foster the development of RES, reduce GHG emissions and promote energy efficiency.
Concerning the NRA, the Royal Decree-Law confirms the designation of CNE as the single regulatory authority at national level to deal with energy issues, regardless the duties attributed to the National Competition Commission (CNC). In this regards, duties and powers of CNE has been strengthened with a view to promoting the competitive functioning of energy markets, fostering the development of the internal energy market and competitive regional markets. In particular, new powers assigned to CNE refers to the approval of methodologies concerning transmission and distribution access tariffs, balancing services, access to interconnection infrastructures, capacity allocation and congestion management procedures, enforcement powers and imposition of penalties and consumers protection.

Main measures adopted in the electricity sector to correct the tariff deficit are summed up as follows:

*Transmission and distribution*

The accrual of revenues generated by transmission and distribution facilities (taking effect for earnings accrued from 1 January 2012) whose commissioning has taken place in a given year (“year n”) will begin on 1 January of the second subsequent year (“year n+2”).

The approval of a new Royal Decree will be sought, under which compensation for investment will only be available for those transmission and distribution assets currently operating and not yet redeemed.

Granting of new administrative authorizations for transmission assets is suspended until the Government approves a new energy network development plan.

Distributors’ revenues associated with supply activities are removed as most of these activities are currently carried out by commercialization entities (suppliers).

*Generation*

Due to lower demand and excess of capacity, the following economic incentives for electricity producers will be reduced:

Capacity payments which are the incentives that reward incoming generation capacity providing for appropriate system adequacy (incentive is twofold, thus rewarding both investment -long term incentive- and availability on SO’s demand -short/medium term incentive).

Subsidies for national coal combustion are limited and subsidies for thermal power plants using national coal is reduced by 10%.

In extrapeninsular electricity systems, additional criteria to calculate the revenue of power plants included in the ordinary regime are adopted (supplementary incentives for fuel will
take into account the efficiency in the management of the acquisition; supplementary incentives for guaranteeing power will be based on the current availability of the plants; incentives for the recovery of investment will include reasonable items; etc).

Consumers
Supplementary incentives for management services relating to the interruption of demand by large consumers are reduced (incentives which reward the capacity of consumers that acquire energy on the electricity market to reduce the power demand in response to an order given by the System Operator).

Electricity System Operator
Its regulated revenues will be paid by those agents in the system who use its services at a regulated price set according to a methodology to be approved by the Government.

Increase in revenue
The last resort tariff (“tarifa de ultimo recurso”) increased by 7% on average compared to the previous tariff.

With the objective of reducing costs in the system, the surpluses of CNE and the Institute for Energy Diversification and Saving (IDAE) from activity carried out in previous years will be considered as an income for the electricity system.

As regards gas sector, the Royal Decree-Law transposes the unbundling provisions obliging TSO of main gas transmission networks to be certified and attributing CNE the duty to certificate and monitor the continuing compliance of transmission system operators and independent transmission operators with the requirements established in the abovementioned legal provisions. On the other hand, CNE shall be responsible for the approval of the methodology for calculating the access tariffs to transmission, regasification and storage facilities belonging to the main network, granting binding decisions to gas undertakings, imposing penalties in case of non-compliance and guaranteeing the effectiveness of consumers’ protection measures. In this regard, shippers shall assume new obligations concerning domestic consumers.

The Royal Decree-Law 13/2012 revised some infrastructure projects to adjust them to the changes in the gas demand forecast, which is lower than expected. In particular, projects for new regasification plants and pipelines not deemed economically profitable for the system have been cancelled or postponed, excluding international commitments and those pipelines mainly used for the local supply of natural gas.

In parallel, some measures were adopted in the gas sector to adapt the grid planning to the new scenario of reduced gas demand in Spain:
The granting of new administrative authorizations for transmission and supply pipelines and regulation and measurement stations is suspended, except for those required in order to comply with international commitments such as gas interconnections, as well as infrastructures needed to deal with the demand of new gas consumers as long as there are no additional costs to the system.

The granting authorization of new re-gasification plants in the peninsula is also suspended (including the granting of the administrative authorization, the approval of project execution and the start-up certificate of assets) until demand for gas justifies otherwise.

The amendments related to the transposition of European Directives within the Energy Sector show as follows:

The incorporation of new rules into the Spanish legal system to achieve an effective separation between transmission and distribution activities, on one hand, and generation and commercialization activities, on the other, both in the electricity and gas sectors.

The Royal Decree-Law 13/2012 establishes the model for gas TSO unbundling in Spain:

- The unbundling model adopted for the main TSO (ENAGAS, with more than 95% of transport pipelines) is “Ownership unbundling”.
- Small gas TSOs in Spain can opt between Ownership unbundling model or ISO model.
- CNE will be in charge of the certification procedure as foreseen by the Directives taking the utmost account of the European Commission’s opinion. It is also foreseen that transmission system operators and independent transmission system operators from outside the European Union can be certified correspondingly.

The role of the national regulatory authority is strengthened; in particular, CNE will be entitled to: (i) approve the methodology to calculate the tariffs for basic access services; (ii) impose penalties; and (iii) issue binding decisions for the companies.

Consumer protection is increased by establishing new measures regarding access to personal and consumption data, prices associated to the cost of services, etc.

The vulnerable consumer concept is defined provisionally in electricity as those with the right to opt for social benefits (the so-called social bonus, in Spanish “bono social” such as pensioners, the unemployed, etc.). The definition of vulnerable consumer and the corresponding measures to guarantee their supply of electricity and gas will be established by the Government.
Other legal provisions on horizontal issues:

**Tariff deficit and new Tax Measures**

In February 2012, CNE launched a public consultation process seeking input and elaborated a report on possible measures that can be taken to tackle the tariff deficit problem afflicting the domestic power sector. This public consultation followed a request to CNE to look into the issue made by the Industry Ministry’s Secretary of State for Energy.

During 2012 and the first months of 2013, the Government has approved a set of regulations with the aim of reducing the tariff deficit, including:

- Royal Decree-Law 1/2012, of 27 January, which suspends remuneration pre-allocation processes and financial incentives for new electricity production installations using co-generation, renewable energy sources and waste.

- Royal Decree-Law 13/2012, of 30 March, which transposes Directives on the internal markets of electricity and gas and adopts measures to correct cost and revenue gaps in the electricity and gas sectors.

- Royal Decree-Law 20/2012, of 13 July, which implements measures to ensure budget stability and to foster competition.


- Act 15/2012, of 27 December, on tax measures for energy sustainability.

- Royal Decree-Law 29/2012, of 28 December, to improve the Special System for Household Employees and other economic and social measures.

- Royal Decree-Law 2/2013, of 1 February, which implements urgent measures in the electricity and financial sectors.

Royal Decree-Law 1/2012 basically established a moratorium on the subsidies for new "special regime" electricity production installations as well as ordinary regime electricity production installations using similar technologies that, at 28 January 2012, lacked an administrative authorisation awarded by the Directorate General of Energy Policy and Mines. On the other hand, a moratorium is set up on the pre-allocated remuneration procedure to have access to the subsidised "premium".

In the above cases, the moratorium applied to (i) special regime installations that had not been registered in the Remuneration Pre-allocation Register by 28 January 2012; (ii)
special regime installations using photovoltaic technology that had not been registered in the Remuneration Pre-allocation Register by 28 January 2012; and (iii) ordinary regime installations that had not obtained an administrative authorisation by 28 January 2012.

The abovementioned Royal Decree-Law 13/2012 also contained other measures aiming at correcting the gap between costs and revenues in the electricity and gas markets. New cost cutting measures were established, including (i) a moratorium on new regasification plants; (ii) a moratorium on administrative authorisations for new gas transport pipelines and regulator and metering stations; and (iii) modifications to the remuneration of underground storage facilities.

On the other hand, Royal Decree-Law 20/2012, of 13 July introduced significant measures affecting different economic areas, including those aimed at correcting cost and revenue gaps in the electricity sector. In particular, several measures were established in relation to the extrapeninsular electricity systems, including measures to review the remuneration model amending the calculation of the fixed and variable costs of plants under the ordinary regime in the extrapeninsular electricity systems. Moreover, the remuneration applicable to transmission services was reduced from 1 January 2012.

The main electricity-related subjects regulated in Act 17/2012 were the suspension during 2013 of the compensation mechanism against the Spanish State budget, as a result of the overcosts of generating electricity in the extrapeninsular electricity systems in 2012.

On 28 December 2012, the Spanish Official Gazette published the Act 15/2012 of 27 December 2012 on tax measures for energy sustainability, which came into force in January 1st 2013. The most important features of the tax measures are summarized below:

**Tax on the production of electric energy**

The law establishes a tax rate of 7% on the income obtained from the production of energy realized by installations under the ordinary regime (e.g., conventional technologies such as nuclear, large hydro, coal, natural gas, and fuel oil power plants) or the special regime (e.g., other technologies such as renewable or cogeneration) that generate electric energy.

**Nuclear tax**

A tax on the production of radioactive waste resulting from the electricity generation with nuclear power plants is set up. The applicable tax rate is:

- €2.190 per kilogram of heavy metal (uranium and plutonium)
- €6.000 per m³ on production of low and intermediate level waste
- €1.000 per m³ for very low level waste
Tax on the storage of radioactive waste

A tax on the storage of radioactive waste is also introduced. The tax rate is:

- €70 per kilogram of used nuclear fuel
- €30,000 per m³ of long-term high and intermediate radioactive waste, other than nuclear fuel
- €10,000 per m³ for low and intermediate level waste
- €2,000 per m³ for very low level waste

Hydroelectric royalty

A royalty for the use of surface and underground water to produce electric energy is established. The applicable tax rate is 22% on the economic value of the hydroelectric energy produced. However, a 90% allowance can apply when certain conditions are met (e.g. hydroelectric installations of less than 50 MW and production facilities over 50MW using hydro pumping storage technology).

Special taxes: “Green cent” and others

The law increases the tax rates on hydrocarbon fuels (green cent) and introduces new taxes as follows:

- It introduces a tax rate on natural gas consumption with a differentiation for installations that produce electricity using natural gas as fuel (general use: 1.15 €/gigajoule; use not related to transport: 0.65 €/gigajoule and other professional uses: 0.15 €/gigajoule).
- It creates specific tax rates on fuel oil and diesels used to produce electricity or to cogenerate heat and power (29.15 €/1000 litres diesel and 12 €/ton fuel oil)
- It establishes special tax rates for specific products.
- It increases the coal tax to €0.65 per gigajoule (previously €0.15 per gigajoule).

The funds collected through the new taxes will be allocated to reduce the current debt in the electricity sector. These taxes will additionally impact on the formation of wholesale market prices and increase final energy prices in Spain.

On the other hand, Royal Decree-Law 29/2012, of December 28, modified certain aspects of the legal regime applicable to renewable energy installations and also amends certain parts of the Spanish Electricity Act, particularly those related to how the tariff deficit will be financed.

As for tariff deficit, Final Provision 4 of RDL 29/2012 removed restrictions to the tariff deficit by repealing the first paragraph of Additional Provision Twenty-one of the Spanish
Electricity Sector Act 54/1997, of 27 November, setting tariff deficit caps for years 2009, 2010, 2011 and 2012 (€3.5 billion, €3 billion, €3 billion and €1.5 billion, respectively).

One month later, on February 2nd the Spanish Government published in the Spanish Official Gazette the Royal Decree-Law 2/2013 (“RDL 2/2013”) that encompasses a set of regulatory modifications applicable to the Spanish electricity sector and affecting the special regime installations (renewable and cogeneration).

Until now, installations falling under the special regime could choose between being remunerated under a regulated feed-in tariff or selling the electricity in the market receiving a complementary premium in euro cents per kilowatt-hour.

RDL 2/2013 eliminates this reference premium for all technologies, amending in this regard Royal Decree 661/2007, of 25 May.

Thus, following the entry into force of this new legislation (January 1st 2013), the two options are the followings: (a) a regulated feed-in tariff; or (b) selling electricity at market prices with no additional premium.

On the other hand, the inflation index used to annually update the remuneration of regulated activities in the electricity sector has been modified by excluding from it price variations in energy and food products and any impact due to tax changes.

Again these measures are intended to reduce the amount of regulated costs and in this way not to increase the current debt in the electricity sector.

**Capacity markets**

CNE carried out a public consultation between 25 May and 21 June 2012 for establishing a new mechanism of capacity payments. The existing capacity payment system needed to be tailored to the current scenario of higher renewable generation, overcapacity of thermal plants and lack of interconnectivity.

In December 2012, CNE presented a proposal to review the current mechanism. The new capacity payment regime is split along two principal lines, with incentives to invest in new capacity and incentives for availability. Under the new proposals, any new incentives to invest would be awarded via an auction, which would be held when the grid operator deems it necessary for the system to seek new generating capacity, using a 10-year timeframe.
On the other hand, the new proposal includes the possibility to mothball ("hibernation") plants where generators consider the capacity payments insufficient or when capacity is not assigned in auctions.

**Bimonthly meter reading and billing for electricity**

Royal Decree 1718/2012 has amended the procedure for the reading and billing of electricity households below 15 kW. From April 1\textsuperscript{st} 2013 onwards electricity households and small companies (up to 15 kW contracted power) receive, by default, their electricity bill every two months together with the readings. Consumers with smart meters would be able to receive monthly reading and billing by the supplier.
2.1 Main developments in electricity markets in 2012

a) Network regulation

The Royal Decree-Law 13/2012 transposes the unbundling provisions contained in the Third Package attributing CNE the duty to certificate and monitor the continuing compliance of transmission system operators with the requirements established. The electricity TSO (REE) was certified as ownership unbundled on 19 July 2012.

CNE has the mandate to approve the methodologies concerning transmission and distribution network tariffs, in accordance with transparent, non-discriminatory and cost-reflective criteria. On 27th June 2012, CNE opened a public consultation on this methodology and later, on 19th November 2012, the results of this consultation were published. Finally, CNE submitted the draft methodology to the Electricity Consultative Board in May 2013.

b) Wholesale market

In 2012, no significant changes have been observed in wholesale market venues, the market structure and the level of competition.

Last year the weighted average spot market price was 59.41 €/MWh (in 2011 it was 60.13 €/MWh). The electricity consumption on the Spanish peninsular system was 252.19 TWh in 2012, 1.2 % lower than in 2011.

MIBEL is adapting operational procedures and schedules in order to facilitate the implementation of day-ahead price coupling with North-West Europe.

c) Retail market

During 2012, more than 3.3 million customers switched supplier in the electricity market (around 2.1 million of such switches were from last resort supply to the liberalised market). The switching rate increased from 5.2% in 2009 to 12.1% in 2012.

The “Supplier Switching Office (OCSUM)” was set up with the aim of monitoring and facilitating supplier switching procedures. CNE has the duty to supervise OCSUM activities.

Retail prices kept rising in 2012, mainly due to mounting access tariffs.
Electricity access tariffs in the last years have been set up below the actual regulated access costs. The difference between costs and tariffs is the so called “tariff deficit”. It is estimated that up to 31st December 2012, the electricity system owes an outstanding debt totalling €25.5 billion. The 57% of this amount (€14 billion) belongs to FADE and is guaranteed by the Kingdom of Spain. The 43% remaining is shared between the electricity companies (30%) and other creditors (13%). As explained in the previous chapter, the Government is developing a number of initiatives in order to tackle this issue.

**d) Public Service Obligations and Consumer Protection**

During 2012 some new measures concerning public service obligations and consumer protection have been established:

- The concept of vulnerable consumer has been set up as well as certain measures to protect them;

- The competent public bodies, together with CNE, shall create points of single contact to provide consumers with all necessary information concerning their rights and existing proceedings for dispute settlement.

- Energy regulation includes last resort gas and electricity tariffs and last resort suppliers.

- Suppliers and distributors must offer customers a free call centre service in charge of handling consumer’s questions and complaints.

Also, existing regulation guarantees access to consumption data in the bills and a switching deadline of three weeks. The “Supplier switching office”, the so-called OCSUM, monitors the supplier switching process.

As for the guarantee of origin and disclosure of electricity system, this system was launched by CNE as of December 1st 2007, following the Order 1522/2007, aiming to inform final electricity consumers in detail about the origin and the environmental impact associated to their energy consumptions. The issuing procedure has been regulated by the Circular 6/2012, issued by CNE on September 27th 2012.

As a measure to promote market transparency, CNE launched a web price comparison tool for gas and electricity offers in April 2011. The tool is available at the following website: [http://www.comparador.cne.es](http://www.comparador.cne.es).

As of 31 December 2012, the comparison tool counted 434 active offers of gas, electricity or dual supply from about 26 different companies.
Concerning consumer complaints, the Autonomous Communities have a general responsibility for customer complaint handling. Regarding last resort tariffs and access to distribution networks, as well as for billing issues, the Autonomous Communities are also competent for the dispute settlement. CNE has the power to supervise the switching processes and to declare the infringement of switching rules. It also supervises the correct application of specific measures for vulnerable customers such as the social bonus (“bono social”). All other issues are dealt by jurisdictional courts when consumer arbitration is not available.

As mentioned, the Royal Decree-Law 13/2012, of March 30th has granted CNE new powers to issue binding decisions in relation to electricity undertakings and to decide on appropriate measures ensuring the full effectiveness of consumer protection measures.

Accordingly, CNE retains the function to ensure the compliance with any prescribed regulation and procedures in relation to the switching of electricity supplier (Function 22nd).

Additionally, CNE has been granted to report and to handle, in coordination with other competent authorities, consumer complaints and has the duty to have at consumers disposal all the information related to consumer rights, regulation in force and procedures to settle disputes, as well as reporting annually to the Ministry on complaints received and making proposals for better regulation (Function 32nd). The necessary coordination between regional bodies and NRA in the handling of consumer complaints is still to be articulated.

Moreover, CNE has now the function to supervise the consumer protection measures, and the power to declare who is responsible for deficiencies of energy supply to consumers (Function 29th), as well as submitting regulatory proposals in relation to quality of service, supply and consumer protection measures to the Ministry and the Autonomous Communities.

CNE is also competent to supervise the adequacy of consumer prices and their supply conditions to the Electricity Act and related regulation.

When enforcing the above described functions, CNE has the power to impose all reasonable measures necessary to attain the objective of ensuring a high quality of service, especially for vulnerable customers, and the compatibility of the exchange of data processes needed to switch supplier (amongst other objectives set forth by the law).
2.2 Main developments in gas markets in 2012

a) Network regulation

The Royal Decree-Law 13/2012 transposes the unbundling provisions contained in the Third Package attributing CNE the duty to certificate and monitor the continuing compliance of transmission system operators with the requirements established. The main gas TSO (ENAGAS) was certified as ownership unbundled on 26 July 2012 subject to the fulfilment of certain conditions. In its meeting dated 18 April 2013, the Board of CNE monitored the fulfilment of these conditions confirming that ENAGAS has adopted the measures needed to comply with the unbundling requirements.

Regarding other TSO certification, Reganosa requested the certification as a Transmission System Operator on 31 July 2012. In December 2012, in its preliminary decision, CNE rejected the certification. Afterwards, on 4 April 2013, CNE issued its final decision rejecting the certification under the ownership unbundling model.

Concerning CNE new duties to establish the methodology to determine rates, tolls and fees for transport and distribution, regasification, storage and tank truck fill-up, CNE is currently developing these methodologies. As part of this process, on 26 November 2012, CNE launched a public consultation with a view to receiving comments from the stakeholders. CNE will submit the final proposal to the stakeholder’s consideration before the approval.

b) Wholesale market

In 2012, no significant changes have occurred in the level of competition or the market structure.

The natural gas consumption has continued its decreasing trend reaching 362 TWh, 3.4% lower than in 2011. It is remarkable the decrease in the share of gas dedicated to electricity generation, reaching a percentage of 23% in 2012 from a 40% in 2009, due to the reduction in consumption because of the economic crisis and the increase of production with renewable energies and coal.

For the time being, gas is actively traded in Spain across eight balancing points: the six LNG terminals; the virtual balancing point (so called AOC) and the virtual storage point comprising the four Spanish underground storage sites in operation (Serrablo, Gaviota, Marismas and Yela). These last two have been put into service in 2012.

Currently, there is no organised gas hub to provide a price reference for gas in Spain. CNE has developed an index for natural gas border prices. In 2012, the natural gas border prices have continued the increasing trend initiated in 2009. According to this index, the
prices from July 2009 to December 2012 have rise up a 93% from 14,03 up to 27,10 €/MWh.

As mentioned in former reports there exists a roadmap to develop a gas hub. In 2012, the creation of an Iberian gas hub has received a new impetus. CNE has created a new working group, running in parallel with the South Gas Regional Initiative that brings together all the stakeholders in order to analyse and discuss the regulatory measures needed to remove all the regulatory barriers to develop this hub. The development of the organized gas market would help to increase the liquidity and transparency of the OTC market (they both would co-exist).

c) Retail market

The number of gas customers in 2012 surpassed 7,3 millions, with 106.701 new customers. By 31 December 2012, the number of consumers supplied at a free price was 5.100.663 (69,07% of all consumers), while the number of consumers supplied at the regulated tariff was 2.284.539 (30,93% of the consumers). Free gas consumers have increased 399.142, representing 7,8% of total gas costumers. There has been an increase in the switching rate since 2006. The switching rate in gas in 2012 kept the high levels reached in 2011, nearly 20%. The number of customers that have changed of supplying company was around 1.4 million, about 80% of the switches took place in the free market and only less than 20% was due to a move from a last resort supplier to the free market (the proportion in 2011 was 70%-30%).

As mentioned before, the “Supplier Switching Office” (OCSUM) was set up with the aim of monitoring and facilitating supplier switching procedures. CNE has the duty to supervise OCSUM activities.

d) Public Service Obligations and Consumer Protection

Royal Decree-Law 13/2012, of March 30th, reinforced CNE powers regarding consumer protection measures regarding gas supply:

- The new article 57 of the Hydrocarbons Act empowers the Ministry to approve a last resort tariff for certain kind of customers and to establish specific supply conditions for vulnerable customers. The concept of vulnerable customer of gas as well as the specific supply conditions should still be defined.

- The competent public bodies, together with CNE, shall create points of single contact to provide consumers with all necessary information concerning their rights and existing proceedings for dispute settlement.
- It also requests suppliers and distributors to offer customers customer care (including a free call center), service in charge of handling consumer’s questions and complaints.

- Consumer has access to consumption data in the bills and a switching deadline of three weeks is regulated.

Royal Decree-Law 13/2012, of March 30th has also granted CNE new powers to issue binding decisions in relation to gas undertakings and to decide on appropriate measures ensuring the full effectiveness of consumer protection measures.

Accordingly, CNE has the function to ensure the compliance with any prescribed regulation and procedures in relation to the switching of gas supplier (Function 22nd).

Additionally, CNE has the function to supervise the consumer protection measures, and the power to declare who is responsible for deficiencies of energy supply to consumers (Function 29th), as well as submitting regulatory proposals in relation to quality of service, supply and consumer protection measures to the Ministry and the Autonomous Communities.

CNE is entitled to report and to handle, in coordination with other competent authorities, consumer complaints and has the duty to have at consumers disposal all the information related to consumer rights, regulation in force and procedures to settle disputes, as well as reporting annually to the Ministry on complaints received and making proposals for better regulation (Function 32nd). The necessary coordination between regional bodies and national regulator in the handling of consumer complaints is still to be articulated.

CNE is also competent to supervise the adequacy of consumer prices and their supply conditions to the Hydrocarbons Act and related regulation.

When enforcing the above described functions, CNE has the power to impose all reasonable measures necessary to attain the objective of ensuring a high quality of service, especially for vulnerable customers, and the compatibility of the exchange of data processes needed to switch supplier (amongst other objectives set forth by the law).

Finally, CNE has also the power to impose penalties to DSOs and suppliers for breach of consumer protection rules as well as for other breaches of regulation including the breach of CNE binding Resolutions.
3 THE ELECTRICITY MARKET

3.1 Network regulation

3.1.1 Unbundling


The Royal Decree-Law 13/2012 sets forth that CNE will be in charge of the certification procedure as foreseen by the Directives. In Spain, there is a single TSO for electricity: Red Electrónica de España (REE). On 4 November 2011, REE submitted a notification requesting to be certified. CNE dealt with the certification procedure and submitted a preliminary decision to the EC on 28 March proposing the certification of REE as an Ownership Unbundled TSO.

The EC approved on 24 May 2012 a favourable opinion on the preliminary certification decision and CNE adopted the final certification decision on 19 July 2012. Following the certification of the Spanish TSO, CNE monitors the compliance with the certification requirements.

Article 11 of Directive 2009/72/EC is not applicable since REE is not controlled by persons from a third country.


By Law, REE SAU is the subsidiary for regulated activities within the REE Group, the holding company being Red Eléctrica Corporación S.A. REE SAU cannot own any shares in companies involved in the generation of electricity or in supply. REE SAU is exclusively dedicated to system operation, management of the transmission grid and transmission. This subsidiary holds all the assets necessary to carry out the activities and assumes all related contracts. On top of the general legal and functional unbundling requirements between regulated and unregulated activities within the group, there are further functional unbundling and accounting separation requirements between SO activities, management of the transmission grid and other activities (transport).

Furthermore, in order to guarantee the independence of the system operator, the Law limits share capital ownership in REE. These equity limits are applicable to the holding company that owns 100% of the regulated activities subsidiary.
Thus, a single person or society cannot, directly or indirectly, own more than 5% share capital or use more that 3% of voting rights. For electricity companies, the limit goes down to 1% of voting rights. The State, via SEPI, must hold at least 10% share capital.

At the date of preparation of this report, the significant shareholders of REC (RED ELECTRICA CORPORACION, S.A.) are those shown in the following table, according to public information of CNMV:

<table>
<thead>
<tr>
<th>RED ELECTRICA CORPORACION, S.A. Significant shareholders</th>
<th>% Direct shareholding</th>
<th>% Indirect Shareholding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociedad Estatal de Participaciones Industriales (SEPI)</td>
<td>20,00</td>
<td></td>
</tr>
<tr>
<td>TALOS CAPITAL LIMITED</td>
<td>3,087</td>
<td></td>
</tr>
<tr>
<td>FIRST EAGLE INVESTMENT MANAGEMENT, LLC</td>
<td>3,055</td>
<td></td>
</tr>
<tr>
<td>FIDELITY INTERNATIONAL LIMITED</td>
<td>1,004</td>
<td></td>
</tr>
<tr>
<td>HSBC HOLDINGS, PLC</td>
<td>3,239</td>
<td></td>
</tr>
<tr>
<td>MFS INVESTMENT MANAGEMENT</td>
<td>3,046</td>
<td></td>
</tr>
<tr>
<td>THE CHILDREN’S INVESTMENT FUND MANAGEMENT (UK) LLP</td>
<td>3,087</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Relevant stakeholders in RED ELECTRICA CORPORACION S.A.
Source: CNMV


Most of the unbundling requirements were introduced in the Spanish legislation in 2010. DSOs are permitted to belong to a group that undertakes other activities including: power generation, electricity recharging services (for electric vehicles) and selling electricity provided that a separate company performs the regulated activities (the so-called legal unbundling).
In addition, functional unbundling for DSOs is required. This includes management separation and measures relating to effective decision-making rights, in accordance with the 2003 and 2009 Directives.

During 2010, vertically-integrated companies have implemented their compliance programs (code of conduct for unbundling activities) and submitted required reports on the unbundling measures to CNE and to the Ministry. CNE has been monitoring these unbundling measures since 2008. Among the measures adopted and explained in the aforementioned reports, the following are worthy to note:

- Measures related to the reorganization of the legal companies that take part of the vertically integrated undertaking including the transfer of assets, personnel and share holdings in order to comply with unbundling requirements;

- The modification of the job functions of certain staff, and of those persons in charge of the management of the regulated activities;

- Revision of the remuneration and contracts of staff in charge of the management of regulated activities;

- Obligation for staff in charge of the management of the regulated firms to sign a formal declaration declaring that they do not own shares or other participations in undertakings which carry on production or supply activities;

- With respect to commercially sensitive information, it has been set up:
  - The revision of procedures of access to that information,
  - The introduction of confidentiality clauses in contracts signed with third parties,
  - The designation of persons in charge of the custody of information,
  - The establishment of disciplinary measures for any breach of the code on separation of activities.

The requirements to separate identity of the supply branch of the vertically integrated undertaking, with a view to avoid confusion in their communication and branding, was recently transposed by Royal Decree-Law 13/2012. No DSO has rebranded in Spain as they all have had separate names to the suppliers of the corresponding group already since legal unbundling came into force. DSOs generally use the same name of the group but adding “distribution” as a reference to the activity of the unbundled company.

In execution of its general powers, CNE approved on the 5th of July 2012 a report on a first follow-up of the compliance programme (code of conduct for unbundling activities) and the
annual report setting the measures taken in 2008, 2009 and 2010 by undertakings to ensure compliance with functional unbundling obligations.

CNE stated in the above mentioned report that the distribution system operators have already established their compliance programme. Therefore, undertakings have incorporated provisions with the aim to guarantee, with different degrees, their compliance with the functional unbundling obligations established by the law, in accordance with different interpretations adopted by the undertakings.

The Royal Decree-Law 13/2012, of 31 March, has introduced an explicit and clear new function for CNE that consists of the monitoring of the functional unbundling among the activities of generation, transmission, distribution and supply in the electricity sector.

When drafting this report, CNE was preparing its first formal report on the supervision of unbundling, in execution of the aforementioned function. Hence, CNE will monitor the implementation of measures, including those foreseen in the Royal Decree-Law 13/2012:

- The appointment of the compliance officer of the Distribution System Operator;
- Those measures taken to ensure vertically integrated distribution system operators shall not, in their communication and branding, create confusion in respect of the separate identity of the supply branch of the vertically integrated undertaking and,
- Those measures taken to ensure that staff responsible for the management of distribution system operator does not participate in the company structures of the integrated electricity undertaking which is responsible for the day-to-day operation of transmission of electricity.

### 3.1.2 Technical functioning

**Balancing services (Article 37(6)(b), Article 37(8), Security and reliability standards, quality of service and supply (Article 37(1)(h))**

Setting the methodology for the provision of balancing services has been entitled to CNE by Royal Decree-Law 13/2012. In Spain, balancing is a market-based activity comprising secondary reserve (both regulation capacity and energy), tertiary reserve (energy), load-generation deviations management and constraints management.

The cost recovery for balancing services is designed in a way that provides appropriate incentives for network users to balance their scheduled input and off-takes. Network users (including renewable generators) that are imbalanced have to cover the costs incurred to balance the system on the basis of a dual imbalance charge.
SYSTEM ADJUSTMENT SERVICES IN THE SPANISH PENINSULAR ELECTRICAL SYSTEM (GWh)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply guarantee constraints¹</td>
<td>12.773</td>
<td>-</td>
<td>12.008</td>
<td>-</td>
<td>-5.99</td>
<td>-</td>
</tr>
<tr>
<td>Technical constraints²</td>
<td>9.998</td>
<td>228</td>
<td>6.162</td>
<td>61</td>
<td>-38.36</td>
<td>-73.34</td>
</tr>
<tr>
<td>Additional Upward Power Reserve³ (GW)</td>
<td>-</td>
<td>-</td>
<td>1.636</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Secondary reserve Availability⁴ (MW)</td>
<td>716</td>
<td>526</td>
<td>709</td>
<td>522</td>
<td>-1.01</td>
<td>-0.77</td>
</tr>
<tr>
<td>Secondary reserve usage</td>
<td>1.213</td>
<td>1.514</td>
<td>1.510</td>
<td>1.262</td>
<td>24.57</td>
<td>-16.64</td>
</tr>
<tr>
<td>Tertiary reserve usage</td>
<td>2.694</td>
<td>2.591</td>
<td>2.992</td>
<td>2.330</td>
<td>11.05</td>
<td>-10.08</td>
</tr>
<tr>
<td>Deviation management service</td>
<td>1.775</td>
<td>2.046</td>
<td>2.658</td>
<td>1.232</td>
<td>49.80</td>
<td>-39.80</td>
</tr>
<tr>
<td>Real time constraints</td>
<td>657</td>
<td>509</td>
<td>635</td>
<td>484</td>
<td>-3.72</td>
<td>-4.99</td>
</tr>
</tbody>
</table>

Table 2. System Adjustment Services in the Spanish Peninsular Electrical System; Years 2011-2012
Source: REE

As for concentration in the balancing market, the tables below show the evolution of market shares by company for secondary reserve (regulation capacity) and tertiary reserve and deviations management (both up- and downwards, respectively):

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endesa</td>
<td>28,6%</td>
<td>31,4%</td>
<td>32,9%</td>
</tr>
<tr>
<td>Iberdrola</td>
<td>28,4%</td>
<td>27,4%</td>
<td>22,0%</td>
</tr>
<tr>
<td>Gas Natural Fenosa</td>
<td>10,8%</td>
<td>12,1%</td>
<td>17,7%</td>
</tr>
<tr>
<td>EDF</td>
<td>19,8%</td>
<td>21,4%</td>
<td>13,8%</td>
</tr>
<tr>
<td>E.On Viesgo</td>
<td>5,7%</td>
<td>4,3%</td>
<td>7,2%</td>
</tr>
<tr>
<td>Others</td>
<td>6,7%</td>
<td>3,4%</td>
<td>6,5%</td>
</tr>
</tbody>
</table>

Table 3. Secondary reserve (regulation capacity) market shares; Years 2010-2011-2012
Source: CNE, OMIE

² Technical constraints PBF (P.O.3.2.).
³ Total annual reserve (GW).
⁴ Average hourly capacity availability (MW).
CNE reports on ‘Operational Procedures’ (O.P.’s) dealing with security and reliability rules; specifically the ones included in ‘Series 1’ (1.1 to 1.6, thus establishing criteria on admissible loads, voltage / reactive power control, frequency / regulation capacity reserve, black-start capabilities, etc.

The Royal Decree-Law 13/2012 entitled CNE to monitor the compliance with network security and reliability rules (26th Function of CNE).

As for transmission service quality index, their measured values and reference limits are determined by Royal Decree 1955/2000, namely: non-supplied energy (ENS), mean interruption time (TIM, equal to ENS over average load in the system) and grid availability index (ID). Last available data (for the Spanish Peninsula in 2011) are: ENS, 280MWh; TIM 0,58 minutes, and ID= 97.74 %.

<table>
<thead>
<tr>
<th>ENS (MWh)</th>
<th>TIM (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peninsula</td>
<td>Balearic Islands</td>
</tr>
<tr>
<td>2007</td>
<td>757</td>
</tr>
<tr>
<td>2008</td>
<td>574</td>
</tr>
<tr>
<td>2009</td>
<td>437</td>
</tr>
<tr>
<td>2010</td>
<td>1,570</td>
</tr>
<tr>
<td>2011</td>
<td>280</td>
</tr>
</tbody>
</table>

Table 5. ENS (energy not supplied) and TIM (average interruption time in minutes); Years 2007-2011.  
Source: REE
CNE monitors compliance with quality of service standards in distribution through two main indexes, TIEPI and NIEPI, which measure, respectively, the time and number of supply interruptions (in terms of equivalent power interrupted).

The next figure shows the evolution of TIEPI (Time of supply interruptions to a load equivalent to the installed capacity) over the past few years.

The NIEPI (Number of supply interruptions to a load equivalent to the installed capacity) in 2011 was 1.48.
**o Monitoring time taken to connect and repair (Article 37(1)(m))**

This monitoring duty has been assigned to CNE by Royal Decree-Law 13/2012 (20th function of CNE). So far, CNE has performed this monitoring on the basis of a previous mandate contained in the Electric Power Act.

For the next distribution regulatory period, new information requirements for monitoring and knowing times taken to connect and repair are currently under discussion. New information will be required to DSO concerning each single network equipment, times out of service due to connection, repair or outages.

In relation to the transmission grid, the System Operator is obliged to declare the time that their facilities are out of service on an individual basis. These data are audited by independent firms which certify the adequacy of the information reported with respect to the collection in the databases of the TSO or sent by companies with transmission assets.

**o Monitoring safeguard measures (Article 37(1)(t))**

The legal provisions sets up by Royal Decree-Law 13/2012 reinforces the competences of the Government in this regard and entitled CNE to watch out the compliance of duties by owners and managers of the transmission network.

Throughout 2012, no safeguard measures had to be taken.


Provided security and quality of supply requirements are met, producers subject to ‘Special Regime’ (i.e. renewable generators, large hydro power plants and cogeneration) have priority dispatch over ‘Ordinary Regime’ ones (conventional plants). Among ‘Special Regime’ producers, preference is given to non-manageable renewables (i.e. wind or solar plants, as opposed to biomass or urban waste, which are deemed ‘manageable’). ‘Special Regime’ generators must deliver binding day-ahead bids and programming and are responsible for their imbalances on even terms with ‘Ordinary Regime’ ones.
3.1.3 Network tariffs for connection and access

Duties and powers of the regulatory authority on (Article 37(1)(a), Article 37(6)(a), Article 37(8), Article 37(10), Article 37(12), Article 37(3)(c) and (d))

In Spain, the Government sets the access tariffs (prior to each update or tariff revision, CNE has to inform the Government proposal issuing a non-binding report) and publishes them in the Spanish Official Gazette.

Access tariffs include transmission and distribution revenues and distributors’ commercial management costs (service to connected consumers) in addition to other levies included in access tariffs as per Spanish Electric Power Act 54/1997 and Royal Decree 1164/2001, namely, subsidies to renewables and cogeneration. Single tariffs are established throughout the entire Spanish territory.

Royal Decree 1202/2010 established, as a general rule, that access tariffs are to be reviewed on an annual basis. Exceptions to this rule, meaning a revision of access tariffs every three months, applied in the following cases:

a) There exist differences between the estimated and the actual deficit of access tariffs.
b) There are substantial changes in the regulation of costs included in access tariffs.
c) There exist exceptional factors affecting either regulated costs or the parameters needed for the calculation of such costs.

However, Royal Decree 1202/2010 was amended by Royal Decree-Law 20/2012, which established that access tariffs shall be reviewed on an annual basis, without exceptions.

According to this legal provision, Order IET/3586/2011, dated December 30th, established access tariffs for the first quarter of 2012, and Order IET/843/2012, dated April 25th, for the rest of the year.

The Royal Decree-Law 13/2012 set forth that CNE is entitled to approve the methodologies concerning transmission and distribution network tariffs, in accordance with transparent, non-discriminatory and cost-reflective criteria.

On 27th June 2012, CNE opened a public consultation on this methodology and later, on 19th November 2012, the results of this consultation were published.

CNE has developed the methodology concerning transmission and distribution network tariffs, in accordance with the European and Spanish legislation, taking into account the
results of the consultation. CNE has submitted, in May 2013, the final proposal to the stakeholder’s consideration before the approval.

On the other hand, CNE will issue a methodology concerning the rest of the costs included in the access tariff.

**o Prevention of cross-subsidies (Article 37(1)(f))**

This duty has been incorporated by Royal Decree-Law 13/2012 as 21st Function of CNE.

Cross-subsidies between transmission, distribution and supply activities are avoided through the accounting unbundling rules and the monitoring carried out by CNE concerning the accounts of companies involved in regulated activities.

CNE has updated this monitoring activity in order to ensure the compliance of all the unbundling requirements. When performing this duty, CNE requires companies operating in the electricity and gas sectors to supply their Balance Sheet, Profit and Loss Account and the rest of their financial statements, with separate accounts. Companies have to report about the incomes, costs, assets and liabilities that relate to each activity in a quarterly basis. CNE uses this information to supervise that subsidies don’t take place between regulated and liberalized activities. In addition to this, CNE analyses the financial and economic health of companies operating in the electricity and gas sectors.

### 3.1.4 Cross-border issues

**o Access to cross-border infrastructure, including the procedures for the allocation of capacity and congestion management (Article 37(6)(c), Article 37(8), Article 37(9), use of revenues for interconnectors (Article 37(3)(f))**

The Royal Decree-Law 13/2012 sets forth that CNE will approve the methodologies establishing the terms and conditions for access to cross-border electricity infrastructures according to the criteria that will be set forth by regulation.

This new competence should facilitate the implementation of the cross-regional roadmaps on long term, day-ahead and intraday cross-border capacity allocation connecting the Iberian market (Spain and Portugal) with the rest of Europe.

- **French-Spanish interconnection (IFE)**

While important increase in interconnection capacity is under way across the Pyrenees, the commercial exchange capacity between Spain and France is still rather limited. The
average commercial capacity in 2012 was 999 MW in the direction France to Spain and 912 MW in the direction Spain to France.

In the context of the South-West Europe region of the ACER Electricity Regional Initiative, the following developments are foreseen for the French-Spanish interconnection:

- **Long term capacity allocation**: Since the 1st June 2006, a coordinated system of capacity explicit auctions is established at the France – Spain interconnection for both long-term horizons (yearly and monthly) and short-term (daily, and intraday since 11th July 2006) jointly managed by RTE and REE. The IFE long term auctions will be transferred to the platform CASC-EU first with physical rights (as it is now, PTR+UIOS\(^5\)) but foreseeing the evolution towards FTRs\(^6\). As the Spanish and French energy regulators (CNE and CRE respectively) supported the extension of that platform to the IFE border, RTE and REE have recently launched a project for transferring French - Spanish yearly and monthly auctions to the explicit auctions platform of the CASC.EU, company jointly owned by the TSOs. This project of transfer of the long term auctions to CASC.EU will result in the application of the Harmonized Auction Rules (HAR) to the auctions in those horizons, (currently in application for the CWE, CSE and Switzerland interconnections), which are being updated to also include the France – Spain Interconnection. A public consultation of these updated Harmonized Auction Rules will be launched early in June 2013, and a User’s Forum to present the project and the rules to stakeholders and receiving their feedback, will be organized before the end of the consultation period. The first French - Spanish capacity auction under the updated Harmonized Auction Rules.

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\(^5\) Physical Transmission Rights with a Use-It-Or-Sell-It mechanism.

\(^6\) Financial Transmission Rights.
and managed by the CASC.EU auctioning system is foreseen to be the monthly auction for December 2013.

- **Day-ahead capacity allocation**: MIBEL (Iberian electricity market) is preparing the operational and regulatory changes needed to implement price coupling with NWE as soon as NWE coupling goes live. TSOs and PXs of the South West region signed a cooperation agreement which set up the basis for the project that is being carried out in order to couple with NWE. This is taking place in coordination with the NWE (TSOs’) project and the Price Coupling of Regions (PXs’) project.

- **Intraday capacity allocation**: In line with the interim target model, implicit continuous allocation, in combination with MIBEL intraday auctions, will be implemented in the French-Spanish interconnection. This project is linked to progress in the NWE intraday project.

- **Portuguese-Spanish interconnection (IPE)**

In this interconnection, all cross-border available capacity is implicitly allocated day-ahead and intraday by means of a market splitting mechanism within MIBEL. The degree of congestion in the Portuguese-Spanish interconnection has followed a downward trend. While in 2007 the interconnection was congested around 80% of the time, in 2012 market splitting was applied almost 9.8% of the time. It is worth mentioning that the export capacity in 2012 reached 2.400 MW.

![Figure 4. Monthly congestion rents and % of hours of daily market splitting in 2012 between Spain-Portugal.](image_url)

Source: CNE

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7 CWE: Central-West Europe; NWE: North-West Europe.
Auctions regarding financial contracts based on the price differences of the Spanish and Portuguese market zones

Since June 13th 2009, when Order ITC/1549/2009 was published, a long-term financial transmission capacity product is auctioned twice a year. It consists on auctions of financial hedging products with half year or annual time horizon. These products are contracts for differences -“forward hedge contract to export electrical energy from Spain to Portugal”-, valued in accordance with observed hourly day-ahead market spread between Portuguese and Spanish zones. The Spanish system acts as the primary issuer of the capacity but market players can bid to sell more capacity on top (as for this chart, SES stands for Spanish Electricity System):

<table>
<thead>
<tr>
<th>Auction</th>
<th>Date</th>
<th>Period</th>
<th>Successful bid price (€/MWh)</th>
<th>Contracts tendered by SES^5 (MW)</th>
<th>Contracts awarded to SES (MW)</th>
<th>Total contracts awarded (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th</td>
<td>13 Dec. 2011</td>
<td>1st Half-year 2012</td>
<td>0.15</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Year 2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7th</td>
<td>12 June 2012</td>
<td>2nd Half-year 2012</td>
<td>0.72</td>
<td>200</td>
<td>200</td>
<td>213</td>
</tr>
<tr>
<td>8th</td>
<td>12 Dec. 2012</td>
<td>1st Half-year 2013</td>
<td>0.05</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
</tbody>
</table>

Table 6. Results of the auctions forward contracts 2012 and 2013 PT-ES.  
Source OMIE
The value of these contracts is rather modest as a consequence of the small differential price observed between both zones.

Throughout 2012, cooperation has continued between the Portuguese and Spanish NRA in the framework of the MIBEL Regulatory Council.

In the context of MIBEL and the SW region of the ACER Electricity Regional Initiative, the following developments are foreseen for the Portuguese-Spanish interconnection:

- **Long term capacity allocation**: Throughout 2012, MIBEL Technical Committee (CT MIBEL) planned to launch a long term coordinated product. This proposal would take into account the results of the “Long Term Transmission Rights Task Force” (LTR TF), the agreement reached by MIBEL Regulatory Council in 2010, as well as the TSOs Integration Framework in CASC. As the Spanish and Portuguese energy regulators (CNE and ERSE respectively) supported the extension of CASC.EU platform to the IPE border, Iberian TSOs compromised to send a request for a comfort letter to CNE and ERSE. Meanwhile, knowing that CASC.EU stated not being able to provide a solution for IPE covering the second half 2013, the MIBEL Regulatory Council is working in a solution for overpassing this difficulty. On the other hand, and in order to grant continuity to the hedge of those agents located at one side of the interconnection point aiming to mitigate the price risk in the other side of the interconnection point, the auctions celebrated in 2012 have kept the same design as the previous auctions, as long as the joint management of the long term treatment of the interconnection will be implemented in the near future.

- **Day-ahead capacity allocation**: In line with the target model, implicit allocation (market splitting) already exists. The Day-ahead Gate Closure Time has been shifted to 12.00 CET in order to pave the way to the implementation of the European common algorithm and coupling with NWE.

- **Intraday capacity allocation**: Currently, there is market splitting mechanism on the basis of six intraday implicit auctions a day. There is a joint proposal by OMIE and EPEXSPOT to combine intraday implicit continuous allocation with intraday implicit auctions in the MIBEL respecting the provisions of the NC CACM.

The revenues resulting from the allocation of interconnection shall be used for only the two following purposes: (a) guaranteeing the actual availability of the allocated capacity; and/or (b) maintaining or increasing interconnection capacities through network investments, in particular in new interconnectors.
Monitoring technical co-operation between Community and third-country TSOs (Article 37(1)(s))

This monitoring has been incorporated as a new duty for CNE by means of the Royal Decree-Law 13/2012 (28th Function of CNE). In this regard, CNE monitors power exchanges between the Spanish and Moroccan systems in accordance to the existing provisions included in the Spanish legislation. It is worthy to note that Morocco is synchronized to the continental European transmission grid through the interconnection with the Spanish system.

[Figure 6. Exchange capacity and market matched energy between Spain and Morocco in 2012. Source: CNE]

Monitor TSO investment plans in view of TYNDP (Art 37(1)(g))

This competence has been transposed by Royal Decree-Law 13/2012 as 24th Function of CNE. However, CNE already monitored the investment plan of the TSO on a regular basis.

Article 10 of Royal Decree-Law 13/2012 established that the System Operator must draft a new nation-wide transmission plan by 30th June 2012, to be eventually approved by the Council of Ministers, after due public consultation and CNE’s evaluation. The latest approved long term planning in Spain covers the period 2008-2016. Nowadays a new planning with horizon 2020 is being carried out. The assessment of consistency between the EU-wide TYNDP 2012 and the Spanish national investment plan will be carried out when both plans are finalised.
The Royal Decree 1955/2000, of 1st December 2000, regulating the activities of transmission, distribution, commercialisation, supply and authorisation procedures for electrical power plants, regulates in articles 8 to 16 the requirements for the development of transmission plans.

**o Cooperation (Article 37(1)(c))**

The Royal Decree-Law 13/2012 has incorporated this duty as one of CNE’s objectives. CNE has a firmly established cooperation with the NRAs of France and Portugal on cross-border issues, especially in the context of the MIBEL and the ACER ERI SW region.

The financial contracts traded in the OTC market and in the power futures market managed by OMIP are under the scope of Spanish Securities Market Law (Law 24/1988) thus supervised by the Spanish Securities Market Commission (Comisión Nacional del Mercado de Valores, CNMV). The Sustainable Economy Act (4 March 2011) modified the Securities Market Law enabling the information exchange between CNMV and the entities composing the MIBEL Regulatory Council. A Multilateral Memorandum of Understanding (MMoU) of 17 May 2011 was signed between the members of the MIBEL Regulatory Council for the cooperation and effective coordination in the MIBEL supervision (coordinated OTC supervision, data collection, etc.).

On 3 July 2012, CNE and the Spanish Securities Market Commission (CNMV) signed a Collaboration Agreement in the framework of the supervision of energy forward markets, last resort supply auctions (CESUR auctions) and Regulation (EU) 1227/2011. That agreement regulates the information exchange with the supervision of CESUR auctions and the wholesale energy markets in the context of investigations about potential market abuse. The agreement reinforces and streamlines the supervision actions of both authorities. The experience gained, the growing importance of the electricity forward markets in the last years, and the influence of these markets on the CESUR auctions and on the hedging decisions of the independent retailers and large consumers, recommends a stronger cooperation between both regulators.

At the end of 2011, CNE made a first data request to CNMV about the OTC transactions corresponding to the same contracts as those ones traded in the CESUR auctions of June and September 2011. That request was related to a CNE enquiry report analysing the OTC trading behavior during the days previous to those CESUR auctions of June and September 2011, due to the OTC price relevance in the CESUR auctions’ price formation. The analysis of such information, together with the information about the transactions in the power futures market managed by OMIP and in the CESUR auctions, was done by CNE, in cooperation with CNMV, as a pioneering experience in the European Union and it was published on July 2012 ("Informe CNE en relación a la supervisión de la negociación en el mercado OMIP y en el mercado OTC y su efecto en la 15ª y 16ª subastas CESUR supervisadas por la CNE"). The main conclusion of such a pioneering report within the
REMIT framework is the absence of suspicions regarding market manipulation in the months around the CESUR auctions held in June and September 2011.

The Board of CNE agreed in June 2012 on a new data request to CNMV to increase the supervision with data related to the CESUR auctions of December 2011, March and June 2012. Data were received in January 2013 and CNE will approve the corresponding report on supervision of CESUR auction 17th and 18th in the coming months.

3.1.5 Compliance

**o Compliance of regulatory authorities with binding decisions of the Agency and the Commission (Article 37(1)(d)) and with the Guidelines (Article 39)**

As already mentioned the Royal Decree-Law 13/2012 obliges CNE to comply with and put into practice those pertinent and binding decisions issued by ACER and the EC. Throughout 2012, there weren’t any binding decisions issued by the EC or ACER towards CNE.

**o Compliance of transmission and distribution companies, system owners and electricity undertakings with relevant Community legislation, including cross-border issues (Article 37(1)(b), Article 37(1)(q), Article 37(3)(a),(b),(e) and Article 37(5) all but (a) and (c) + imposing penalties (Article 37(4)(d))**

CNE shall ensure compliance of transmission and distribution system operators and, where relevant, system owners, as well as of any electricity undertakings, with their obligations under Royal Decree-Law 13/2012, Spanish Electric Power Act or any other legal provision, including cross-border issues.

Following the certification of the Spanish TSO (the final decision was issued on 19 July 2012) CNE monitors the compliance with the certification requirements.

On the other hand, CNE drafts an annual report on its activity elaborating on the fulfilment of its duties. The content of this report is included in the annual sectorial report to be drafted by CNE. In this regard, CNE shall propose any regulatory improvement to the Ministry of Industry, Energy and Trade.
3.2 Promoting Competition

3.2.1 Wholesale markets

3.2.1.1 Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition (Article 37(1)(i),(j), (k), (l) (u) and Article 40 (3))

The duties contained in article 37(1)(i) and (j) have been transposed as Functions 30th and 31st of CNE by the Royal Decree-Law 13/2012.

Spot market

The wholesale (spot) market in Spain is made up of an organised part and a non-organised part. The organised market is structured around a day-ahead market followed by six intraday auctions. The non-organised part consists of physical bilateral contracts, whose economic terms and conditions are agreed between the signing parties (which are not known by CNE but whose nomination has to be notified to the Market Operator). Therefore, the negotiated quantities are unknown. During 2012 bilateral contracts represented 28% of the sold energy in the daily programme (PBF: Functioning Base Programme).

- Prices

In 2012, the weighted\(^8\) average spot market price was 59.41 €/MWh (a little bit lower than previous year). The daily market price has represented in Spain 82% of the final price, the capacity payments a further 10%, and the solution to technical restrictions, the secondary regulation and other technical operation processes account for 7.7%.

- Transparency

Spot market prices (day-ahead and intraday) are published at OMIE website (www.omie.es) a few hours after the auctions are finished. Three months later, the names of the suppliers are published.

- Effectiveness of competition

The Iberian spot market is very liquid; it gathers 241 buyers and 1.070 sellers. Competition is effective and it can be analysed through benchmarking prices with those of other

\(^8\) Including different market sessions plus balancing and reserves costs.
European spot markets. In case of Spanish day-ahead market prices fall in the range of other European market prices.

![Figure 7. European electricity day-ahead market prices in 2012
Source: European PX]

**REMIT**

The Royal Decree-Law 13/2012 –transposing the Directive 2009/72/EC– modifies the Electric Power Act allowing the Ministry of Industry, Energy and Tourism, CNE, the Spanish Competition Authority and the European Commission to access during at least 5 years to the data of all the transactions of the electricity supply contracts as well as the electricity derivatives concluded with the wholesale customers and the Transmission System Operators.


In the Spanish scope, CNE meets the market participants to discuss the compliance of the obligation to publish insider information (REMIT article 4).

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9 The CMIT WG has a Task Force called "Wholesale Energy Market" (WEM TF). The AMIT WG has two Task Forces called "Market Monitoring Governance" (MMG TF) and "Wholesale Market Surveillance" (WMS TF).
Regarding the current monitoring practices of CNE for the wholesale electricity market, a description is provided in “CEER monitoring report on transaction reporting and detecting market misconduct in wholesale energy markets - Good practice examples from national regulatory authorities” (Ref. C11-WMF-12-03, 1 December 2011).

In addition to above mentioned monitoring tasks, CNE publishes market oversight reports with aggregated data and no commercially sensitive information (e.g. CNE monthly report regarding the supervision of the Spanish electricity forward markets10).

The duty contained in article 37(1)(u) is considered within the framework of regional cooperation. In the electricity market, compatible data exchange with France and Portugal between TSOs and PXs happens on a regular basis. One example of that is the data submitted by REE to be published at ENTSOE website (www.entsoe.net).

**The dominant OTC market**

Conversely to the sustained volume growth of the previous years, the OTC traded volumes in 2012 (248.1 TWh) decreased 12.6 % compared to 2011 (283.9 TWh). Figure 8 shows the evolution of the OTC traded volumes since year 2007.

![Figure 8. Accumulated OTC volume traded in one year (TWh) (2007 to 2012)](image)

*Source: CNE with data from brokers*

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10 All CNE market oversight reports are available at: www.eng.cne.es/cne/contenido.jsp?id_nodo=113.
Prices

The Spanish OTC market ("Over The Counter") is a non organized bilateral market, in which traders, usually by means of a broker, trade forward contracts with cash settlement. Hence, according to article 2.3 of the Securities Market Law, they are to be considered as financial instruments. In the Spanish market, the supervision of the financial contracts traded in the OTC market is under the scope of the MiFID\textsuperscript{11} (Directive 2004/39/EC) and the Securities Market Law\textsuperscript{12}, and thus it relates to the supervisory field of the Spanish Securities Market Commission (Comisión Nacional del Mercado de Valores, CNMV).

Therefore, it is necessary to focus the supervision of this market with a coordination perspective between CNMV and CNE. In this sense, the Directive 2009/72/EC\textsuperscript{13} indicates in its recital 39 the necessary cooperation between energy market regulators and financial market regulators in order to enable each other to have an overview over the markets concerned\textsuperscript{14}.

On March 5 2011, the Sustainable Economy Act was published in the Spanish Official Gazette. The 5\textsuperscript{th} final disposition of this Law modified the Securities Market Law, enabling the information exchange\textsuperscript{15} between CNMV and the entities composing the MIBEL Regulatory Council\textsuperscript{16}. The members of the MIBEL Regulatory Council signed on May 17 2011, a Multilateral Memorandum of Understanding (MoU) for the cooperation and efficient coordination in the MIBEL supervision, permitting their coordinated OTC supervision, facilitating among others the data collection.

In the scope of the cooperation between regulatory agencies, the so-called REMIT EU Regulation\textsuperscript{17} states explicitly as necessary in its Recital 29 that “national regulatory authorities, competent financial authorities of the Member States and, where appropriate,


\textsuperscript{14} Such cooperation is in line with the Regulation (EU) No 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency (commonly known as "REMIT").

\textsuperscript{15} In particular, section 15 of that legal disposition adds a new paragraph ("ll") to article 90.4 (exemptions to the obligation of professional secrecy) as follows: "ll) The information that CNMV provides to the Spanish supervisory authorities in energy matters and to the supervisory authorities of the Iberian Electricity Market, and that are necessary for their supervisory functions of those markets. In this way, the co-operation agreements that CNMV have signed with other authorities will be taken into account. The information exchanged will only be published if CNMV specifically consents it."

\textsuperscript{16} MIBEL stands for "Mercado Ibérico de Electricidad" (Iberian Electricity Market); http://www.mibelcr.com/. The MIBEL Regulatory Council is composed of CNE, CNMV, ERSE (Portuguese National Regulatory Authority) and CMVM (Portuguese Securities Market Commission).

national competition authorities should cooperate to ensure a coordinated approach to tackling market abuse on wholesale energy markets which encompasses both commodity markets and derivatives markets”.

The improvement of the supervision of the OTC market is also under the scope of application of REMIT. This Regulation, aiming to improve the market integrity and transparency of the wholesale energy markets, specifies that the wholesale energy markets “encompass both commodity markets and derivative markets”, that “include, inter alia, regulated markets, multilateral trading facilities and over-the-counter (OTC) transactions and bilateral contracts, direct or through brokers”, and that the “price formation in both sectors is interlinked”.

Although, CNE has limited information over OTC power transactions (volumes and transaction prices, through the information voluntarily submitted by the main brokers), on the other hand, by means of the Collaboration Agreement between the Spanish energy regulator and the Spanish Securities Market Commission (Comisión Nacional del Mercado de Valores, CNMV), signed on 3 July 2012, CNE can ask CNMV about OTC transactions corresponding to the same contracts as those ones traded in CESUR auctions, as previously commented.

CNE has access to all data traded/registered in OMIP-OMIClear, by means of the existing cooperation procedures between the members of the MIBEL Regulatory Council.

- **Transparency**

CNE publishes in monthly supervisory reports of the electricity forward markets in Spain aggregated data from all the existing forward market mechanisms and trading venues (i.e. CESUR auctions, OTC market, the futures market managed by OMIP, and the cleared volumes in the existing clearing houses OMIClear and MEFF Power).

- **Effectiveness of competition**

So far there has been limited information available regarding the considerable volume of transactions conducted in OTC markets, as well as for the physical bilateral contracts (particularly contracts between companies of the same group).

CNE recommends in its Report on the Development of Competition in Gas and Electricity Markets (Period 2008-2010 and Preview 2011)\(^\text{18}\) the development of coordinated supervision of the Spanish OTC market by CNE and the Spanish Securities Market Commission (CNMV). Regarding the electricity market, full information on OTC financial transactions...
contract transactions with embedded electricity components must be available and this information should be shared by the financial regulator and the energy regulator so that players’ positions and changes in the forward price of electricity can be properly supervised. This coordination is especially important as the OTC electricity market, which is purely financial and is supervised by the Spanish Securities Market Commission (CNMV), is affecting forward contract prices for electricity. It particularly affects price movements in CESUR auctions, which are used for the calculation of the Last Resort Tariff, and hedging conditions available to new competitors who do not have a vertically integrated generation and sales structure. Within the scope of the Memorandum of Understanding between the Spanish Securities Market Commission (CNMV), CNE, the Portuguese Securities Market Commission (CMVM) and the Portuguese Entergy Regulator (ERSE) on cooperation and the effective coordination of supervision of the electricity market, an agreement was signed by CNMV and CNE on 3 July 2012 to regulate the exchange of information related to the supervision of CESUR auctions and wholesale energy markets in the context of investigations into potential market abuses. The agreement is also related to the process of cooperation between financial and energy institutions under the European Regulation on Energy Market Integrity and Transparency (REMIT). Full information on transactions in the OTC market is also necessary for the supervision of the gas market, and CNE’s powers to apply sanctions regarding players’ conduct in the markets and their coordination with the financial regulator to prevent abuse in the market (manipulation or the use of privileged information) must be clearly established and possible impediments to the liquidity of the forward market (implications affecting the development of sales by new players) identified.

The power futures market managed by OMIP

In the context of the MIBEL Regulatory Council, CNE supervised the futures market managed by OMIP\(^\text{19}\), in co-ordination with the other members of the MIBEL Regulatory Council. Such a market started on 3\(^{\text{rd}}\) July 2006. The rules of this market are registered on the Portuguese Securities Market Commission (Comissão do Mercado de Valores Mobiliários, CMVM).

The energy traded in the continuous market of the MIBEL Iberian electricity futures market managed by OMIP during year 2012 amounted to 32.82 TWh, slightly lower than in the previous year (32.87 TWh in 2011)\(^\text{20}\). Therefore, the increasing trend for the traded volumes experienced in previous year didn’t continue in 2012 (same situation as in the OTC market commented above). However, the OTC volumes cleared and settled by OMIP

\(^{19}\) *Operador do Mercado Ibérico de Energia* SGMR, S.A. (Iberian Energy Market Operator, Portuguese side).

\(^{20}\) Additionally, 5.67 TWh were traded through OMIP auction mode for selling special regime production in Portugal. In particular, on 22 March, 14 June, 20 September and 13 December 2012, the 2\(^{\text{nd}}\), 3\(^{\text{rd}}\), 4\(^{\text{th}}\), and 5\(^{\text{th}}\) auctions in which the Portuguese last resort supplier (EDP Serviço Universal, S.A.) sells special regime production in Portugal (known as PRE auction, “Produção em Regime Especial”) were performed.
clearing house (OMIClear) increased in 2012 (28.27 TWh) compared to 2011 (27.08 TWh).

Figure 9 shows the trading evolution (in terms of energy traded) in the MIBEL Iberian electricity futures market (OMIP auctions and OMIP continuous market), the volumes traded in the OTC market, and the part of such volumes registered in OMIP and cleared and settled by OMIClear\(^2\) (OMIP clearing house, central counterparty and managing entity of the settlement system).

Additionally, another clearing house (Meff Power) is active since 21 March 2011 for OTC clearing of Iberian power derivatives. So far, only OTC baseload swaps with underlying price the spot price of the Spanish zone have been cleared and settled. The accumulated volume during year 2012 reckons 8.55 TWh (monthly average of 0.71 TWh). This clearing house has experienced a remarkable growth compared to its first year of performance (in year 2011, the accumulated volume was 3.76 TWh, i.e. a monthly average of 0.38 TWh).

\[\text{Figure 9. Evolution of accumulated traded volumes per year in OMIP auctions and continuous market, and OTC volumes registered in OMIP and MEFF Power (TWh), years 2007-2012} \]
\[\text{Source: OMIP-OMIClear and Bolsas y Mercados Españoles (BME)}\]

- Prices

Figure 10 shows the daily evolution of the Spanish electricity spot (day ahead) and futures prices during 2012. For the spot price, the daily average published by OMIE is considered. For the futures prices, settlement prices published by OMIP are used. The prompt month, quarter and year contracts (“M+1”, “Q+1” and “Yr+1” respectively) for the base load futures

whose underlying price is the Spanish spot price ("FTB" contracts) are shown. The volatility of the spot prices is much larger than the volatility of the futures prices, due to the strong renewable penetration. The annual average price for the spot price (47.23 €/MWh) is lower than the annual average prices for the futures contracts (51.07 €/MWh for the prompt month contract, 52.73 €/MWh for the prompt quarter contract and 52.50 €/MWh for the prompt year contract). The futures contracts showing larger volatility in Figure 10 are the monthly contracts, fluctuating between 43.90 €/MWh and 56.70 €/MWh.

![Figure 10. Evolution of daily spot prices and prompt month, quarter and year ("M+1", "Q+1" and "Yr+1" respectively) futures prices (€/MWh) during year 2012 Source: OMIE and OMIP-OMIClear](image)

- **Transparency**

The following sources provide information regarding post-trade transparency are available by the existing clearing houses and the power futures market operator:

- Historical aggregated data per contract regarding settlement prices, best bid and offer, traded and cleared volumes, and open interest by OMIP-OMIClear, as well as daily market bulletins with the key statistics of the trading sessions and information.
of any special event (e.g. market maker agreements, new trading member, special regime auctions in Portugal, etc.).

- Historical aggregated data per contract regarding settlement prices, cleared volumes and open interest by MEFF Power.

*Effectiveness of competition*

According to the power futures market operator\(^{22}\) and its clearing house, in year 2012 a new yearly record was produced in exchange volume (auction and continuous), number of trades (an increase of 17% on a year to year basis), and cleared volume (67 TWh in year 2012, a 9% increase on a year to year basis). A new market maker joined the market (in addition to the 4 existing market makers –Citigroup, Deutsche Bank, Axpo Iberia, and Nexus Energía–, a new entity (JP Morgan) became market maker in May 2012). New contracts were launched (the FTBYr+3 started in September 2012, enlarging the forward curve). At the end of year 2012, there are 39 trading members in the power futures market (the same amount as in MEFF Power, although only 17 in common). Additionally, 4 brokers intermediate for the registration of OTC trades in OMIClear.

*Supply of Last Resort Auctions (CESUR Auctions)*

As previously commented, from 1 July 2009, the default supply is no longer a part of distribution and becomes entirely provided by last resort suppliers, in accordance with Royal Decree 485/2009 of 3 April, which regulates the implementation of the supply of last resort in the electricity market.

The Order ITC/400/2007 of 26 February regulated bilateral trading of electrical energy with physical delivery by the companies responsible for default supply on the Spanish mainland. Since June 2010, the Order ITC/1601/2010 regulates CESUR auctions whose resulting price is used as a reference for setting the last resort tariff.

The Royal Decree 302/2011\(^{23}\), of 4 March 2011, aims to establish a compulsory purchase mechanism for the last resort suppliers and compulsory sale mechanism for the special regimes facilities\(^{24}\) of products with price differences settlement between CESUR prices and the spot prices. The maximum compulsory volume is obtained through the difference between the sum of the last resorts suppliers’ requested quantities –communicated

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23 “Real Decreto 302/2011, de 4 de marzo, por el que se regula la venta de productos a liquidar por diferencia de precios por determinadas instalaciones de régimen especial y la adquisición por los comercializadores de último recurso del sector eléctrico”, published in the Spanish Official Gazette (BOE) on March 5, 2011.

24 Facilities choosing option a) in the article 24.1 of Royal Decree 661/2007 (feed-in tariff option).
beforehand to the Ministry of Industry, Tourism and Trade— for the period in force of the last resort rate and the quantities matched in the corresponding CESUR auctions. This mechanism reduces the last resorts suppliers' risk, as it lets them purchase all the requested energy at the same cost.\(^{25}\)

The products purchased by the last resort suppliers in the CESUR auctions are standard quarterly forward contracts (base load and peak products) also traded in the forward markets. In this sense, there is a strong interrelation between the resulting equilibrium price in the CESUR auction and the price formation in the existing forward trading venues, i.e. the power futures market managed by OMIP and especially in the OTC market (as the latter presents a larger trading volume). Due to this, CNE is improving its supervisory role of the OTC market and the influence the OTC market on the CESUR auctions. Such an improvement of the supervisory capacity is being implemented with the collaboration of the financial regulator.

- Prices

As indicated before, the price formation in the CESUR auctions is much influenced by the prices in the futures market and the OTC transactions.

The following table summarises the results of the CESUR auctions held in 2012:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Auctioned products</td>
<td>Q2-12 Base load</td>
<td>Q2-12 Peak</td>
<td>Q3-12 Base load</td>
<td>Q3-12 Peak</td>
</tr>
<tr>
<td>Participants</td>
<td>28</td>
<td>29</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Winners</td>
<td>14</td>
<td>18</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>Target volume (MW)</td>
<td>65</td>
<td>70</td>
<td>67</td>
<td>70</td>
</tr>
<tr>
<td>Starting price (€/MWh)</td>
<td>51.00</td>
<td>56.27</td>
<td>56.25</td>
<td>61.50</td>
</tr>
</tbody>
</table>

Table 7. CESUR Auctions: results of CESUR auctions in 2012
Source: auction administrator and CNE

- Transparency

These auctions are managed by OMEL Mercados (one of OMIE’s daughter companies). The conditions for participating and the results are published in its website.

\(^{25}\) Every time the matched energy in the spot market by such special regime facilities is bigger than the last resort suppliers’ demand not auctioned in CESUR.
The following CESUR Auctions results are published by the auction administrator: auctioned quantity, matched quantity, equilibrium price, and diverse figures regarding the percentage per auctioned contract (base load or peak) related to the matched quantities for the different market participants’ types: sellers belonging to owners of generation assets in Spain, sellers resident in Spain, or sellers belonging to a vertically integrated group with last resort supplier.

- Effectiveness of competition

In the supervisory framework of the CESUR auctions, CNE is monitoring the evolution of the forward prices, taking into account the evolution of those variables with potential influence in the Spanish forward electricity price formation, as well as in the liquidity of the power futures market managed by OMIP and the OTC market.

**Structure of the Generation Market – Generation Capacity**

On 31st December 2012, the generation capacity shares of the different companies in the “ordinary regime” (conventional generation) of Spanish mainland electricity system were as shown on the following table:

<table>
<thead>
<tr>
<th>Available generation capacity</th>
<th>HHI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iberdrola</td>
<td>29.06%</td>
</tr>
<tr>
<td>Endesa</td>
<td>26.19%</td>
</tr>
<tr>
<td>Gas Natural Fenosa</td>
<td>20.34%</td>
</tr>
<tr>
<td>E.ON</td>
<td>6.87%</td>
</tr>
<tr>
<td>EDP-Hidrocantábrico</td>
<td>6.58%</td>
</tr>
<tr>
<td>Others</td>
<td>10.97%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HHI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2050</td>
</tr>
</tbody>
</table>

*Table 8. Companies’ market shares of available generation capacity in the ordinary regime (year 2012)*  
*Source: CNE*

As shown in the above table, the number of companies with more than 5% of the Spanish electricity system’s installed power is 5. The Companies are: IBERDROLA, ENDESA, GAS NATURAL FENOSA, E.ON and EDP-HIDROCANTÁBRICO.
Structure of the Generation Market - Energy

As for 2012, there were five traditional groups of a significant size competing in the market: ENDESA, IBERDROLA, GAS NATURAL FENOSA, EDP-HIDROCANTÁBRICO and E.ON, whose market shares in energy are shown below.

<table>
<thead>
<tr>
<th>Incumbents, in both, Ordinary and Special regime. Breakdown:</th>
<th>Energy Share</th>
<th>HHI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endesa</td>
<td>23.8%</td>
<td></td>
</tr>
<tr>
<td>Iberdrola</td>
<td>20.1%</td>
<td></td>
</tr>
<tr>
<td>Gas Natural Fenosa</td>
<td>14.4%</td>
<td></td>
</tr>
<tr>
<td>EDP - Hidrocantábrico</td>
<td>6.0%</td>
<td></td>
</tr>
<tr>
<td>E.ON</td>
<td>3.0%</td>
<td></td>
</tr>
<tr>
<td><strong>Companies in Ordinary Regime only</strong></td>
<td><strong>3.7%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Companies in Special Regime only. Breakdown:</strong></td>
<td><strong>26.3%</strong></td>
<td>(1329-1344)</td>
</tr>
<tr>
<td>EGL</td>
<td>8.1%</td>
<td></td>
</tr>
<tr>
<td>Acciona</td>
<td>4.7%</td>
<td></td>
</tr>
<tr>
<td>Energya VM</td>
<td>2.7%</td>
<td></td>
</tr>
<tr>
<td>Nexus</td>
<td>2.2%</td>
<td></td>
</tr>
<tr>
<td>Wind to market</td>
<td>2.2%</td>
<td></td>
</tr>
<tr>
<td>DETISA</td>
<td>0.8%</td>
<td></td>
</tr>
<tr>
<td>Abengoa</td>
<td>0.6%</td>
<td></td>
</tr>
<tr>
<td>Sacyr Vallehermoso</td>
<td>0.5%</td>
<td></td>
</tr>
<tr>
<td>Rest of companies</td>
<td>4.4%</td>
<td></td>
</tr>
<tr>
<td><strong>Imports</strong></td>
<td><strong>2.9%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 9. Companies’ market shares in electricity generation (year 2012)

Source: CNE

ENDESA, IBERDROLA, GAS NATURAL FENOSA, EDP-HIDROCANTÁBRICO and EGL are the Companies with market shares in excess of 5%. ENDESA, IBERDROLA, GAS NATURAL FENOSA and EDP-HIDROCANTÁBRICO are incumbents. EGL’s and ACCIONA’s market share is composed only by Special Regime generation. The share of the first five companies shown in the table includes Ordinary and Special Regime.
**Monitoring the occurrence of restrictive contractual practices (Article 37(1)(k))**

The Royal Decree-Law 13/2012 has reinforced this duty already performed by CNE. As a consequence, CNE is entitled to analyse specific cases following a complaint of the affected party.

**Respecting contractual freedom with regard to interruptible supply contracts and with regard to long-term contracts (Article 37(1)(l))**

The Royal Decree-Law 13/2012 has incorporated this duty as one of CNE’s functions. CNE intervenes after the receipt of a complaint as regards breaches of contractual freedom. This activity is performed under the framework of market monitoring activities.

In case some demand has to be curtailed, there is a service provided by some consumers called “interruptible demand”. The revenue regime for this service has been revised in 2012 by Order IET/2804/2012, of 27th December. This revision took place considering the low demand and high penetration of renewable generation.

**3.2.2 Retail market**

By Royal Decree 1718/2012, the procedure for the reading and billing of electricity households below 15 kW was amended.

In 2008, the Government approved the Substitution plan for all Spanish residential meter (up to 15 kW contracted power) for new smart metering devices before the end of 2018.

According to this new legal provision, from April 1st 2013 onwards electricity households and small companies (up to 15 kW contracted power) receive their electricity bill every two months together with the readings unless they have smart metering. Billing should be based on real reading and will be issued by the last resort supplier (provided that they are supplied by the last resort tariff). However, subject to the previous agreement among the consumer, the supplier and the reader, billing could be issued monthly. In that case, billing will be based on estimated consumption.

Those consumers with smart metering would be able to receive monthly reading and billing by the supplier.

From April 1st 2013, electricity companies have informed their clients about this change of billing, attaching a letter to the first three bills issued according to the new procedure.
3.2.2.1 Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition (Article 37(1)(i),(j),(k),(l),(u) and Article 40 (3))

As mentioned in 3.2.1.1, the duties contained in article 37(1)(i) and (j) have been incorporated as Function 30th and 31st of CNE by the Royal Decree-Law 13/2012.

- Prices

At retail level, CNE monitors retail prices through the commercial offers that are published in CNE’s price comparison tool and through the “Circular” 2/2005. By this Circular, suppliers are officially requested to submit a declaration of the average invoice charged to each type of customer (according to the access tariff group). The results of this monitoring are published in CNE’s retail electricity market report which is published every six months. Besides the ex-officio monitoring performed by CNE, these duties can be executed as well following a complaint from a customer on an ad-hoc basis.

For small consumers, the price of the last resort tariff remains as a relevant reference.

During 2012 the prices of the last resort tariff were the followings:

<table>
<thead>
<tr>
<th></th>
<th>Without hourly discrimination</th>
<th>Average price c€/kWh</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Capacity term €/kW a year</td>
<td>Energy term €/kWh</td>
</tr>
<tr>
<td>Q1</td>
<td>27,182742</td>
<td>0,168075</td>
</tr>
<tr>
<td>Q2: March- April</td>
<td>21,893189</td>
<td>0,142138</td>
</tr>
<tr>
<td>Q2: June</td>
<td>21,893189</td>
<td>0,142208</td>
</tr>
<tr>
<td>Q3</td>
<td>21,893189</td>
<td>0,149198</td>
</tr>
<tr>
<td>Q4</td>
<td>21,893189</td>
<td>0,145578</td>
</tr>
<tr>
<td><strong>2012</strong></td>
<td><strong>21,893189</strong></td>
<td><strong>19,146</strong></td>
</tr>
</tbody>
</table>

Table 10. Yearly average and quarterly prices of last resort tariff without hourly discrimination.

Source: own elaboration.
### Table 11. Yearly average and quarterly prices of last resort tariff with hourly discrimination.

Source: own elaboration.

<table>
<thead>
<tr>
<th></th>
<th>Capacity term €/kW a year</th>
<th>Energy term €/kWh</th>
<th>Average price c€/kWh</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Period 1</td>
<td>Period 2</td>
<td></td>
</tr>
<tr>
<td>Q1</td>
<td>27,182742</td>
<td>0,208833</td>
<td>0,062260</td>
</tr>
<tr>
<td>Q2: March- April</td>
<td>21,893189</td>
<td>0,172438</td>
<td>0,060700</td>
</tr>
<tr>
<td>Q2: June</td>
<td>21,893189</td>
<td>0,172518</td>
<td>0,060780</td>
</tr>
<tr>
<td>Q3</td>
<td>21,893189</td>
<td>0,180838</td>
<td>0,067940</td>
</tr>
<tr>
<td>Q4</td>
<td>21,893189</td>
<td>0,178438</td>
<td>0,059070</td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 12. Yearly average and quarterly prices of last resort tariff with hourly discrimination (three periods).

Source: own elaboration.

<table>
<thead>
<tr>
<th></th>
<th>Capacity term €/kW a year</th>
<th>Energy term €/kWh</th>
<th>Average price c€/kWh</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Period 1</td>
<td>Period 2</td>
<td>Period 3</td>
</tr>
<tr>
<td>Q1</td>
<td>27,182742</td>
<td>0,209923</td>
<td>0,074608</td>
</tr>
<tr>
<td>Q2: March- April</td>
<td>21,893189</td>
<td>0,172278</td>
<td>0,070370</td>
</tr>
<tr>
<td>Q2: June</td>
<td>21,893189</td>
<td>0,172358</td>
<td>0,070440</td>
</tr>
<tr>
<td>Q3</td>
<td>21,893189</td>
<td>0,180508</td>
<td>0,077160</td>
</tr>
<tr>
<td>Q4</td>
<td>21,893189</td>
<td>0,179448</td>
<td>0,070800</td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The prices of the last resort tariff as from 1st January 2013 (first quarter 2013) were the followings:

– Capacity (fix) term: 21.893189 €/kW a year.
– Energy term (consumption):
  ▪ Without hourly discrimination: 0.150938 €/kWh
  ▪ With hourly discrimination, two periods:
    o Period 1: 0.183228 €/kWh
    o Period 2: 0.063770 €/kWh
  ▪ With hourly discrimination, three periods:
    o Period 1: 0.184298 €/kWh
    o Period 2: 0.077720 €/kWh
    o Period 3: 0.052775 €/kWh

• Transparence

CNE’s price comparison tool aims to improve the transparency of retail markets. However, suppliers don’t have a legal obligation to publish every supply offer and they can freely negotiate prices and conditions with customers bilaterally.

The duty contained in article 37(1)(u) has been transposed in the Spanish legislation. CNE has been granted the power to impose all reasonable measures necessary to attain the objective of ensuring a high quality of service and the compatibility of the exchange data processes needed to switch suppliers (amongst other objectives set forth by the law).

Also CNE monitors the “Supplier Switching Office” (OCSUM) activities whose main target is to facilitate the process for switching supplier. CNE is developing a very active role in monitoring OCSUM and ensuring that OCSUM properly addresses these issues in their working groups. Existing regulation establishes the following deadlines timeframes to be met by distribution companies (DSOs):

• DSOs must give reply to a switching request (this is usually presented by the retailer on behalf of the customer) within a period of five working days for low voltage customers. For medium and high voltage customers this period is fifteen days.
In the case of a simple switch, the DSO must activate it in less than a fortnight in the case of low and high voltage customers. This period could be increased if the customer asks for a real metering at the settlement bill date.

However, the existing regulation does not fully establish the operational aspects and formats for the communications flows that should take place between retailers and DSOs reached within the context of the working groups facilitated by OCSUM.

The Royal Decree-Law 13/2012 introduced a general timeframe of three weeks for the switching process in electricity. According to this new piece of legislation, not only DSOs but also suppliers will have to comply with legal deadlines in relation to the switching process, to be established through future specific regulations.

Furthermore, suppliers have to keep during five years the records of their supply contracts to be available to CNE.

During 2012, around 2.1 million of consumers abandoned the last resort supply (taking into account data collected from the five major Spanish distribution companies) in favour of the free market. During the year 2012, the switching rate increased respect 2011, reaching 12.07% mainly due to the increase of free market switches.

Total switching rate is diluted by the high number of households in Spain. Almost 97% of total consumption points belong to this segment.

CNE monitors the switching rate, and other related statistics, through: (1) a quarterly report elaborated by the switching office (OCSUM) and (2) the information sent directly from distribution companies, on a quarterly basis, under CNE’s Circular 1/2005. OCSUM’s reports are not public. The Office only has the legal obligation to communicate switching and other related data to CNE, the Central Government and the Regional Governments.

As shown in the table below, the evolution of the switching rate during the last three years has followed an increasing trend, reaching 12.07% in 2012, although this growth rate has slowed down for the last year. On the other hand the number of failed switches has decreased significantly (this number mainly tends to reflect errors and lack of standard formats in the communication process between retailers and DSOs).
### ELECTRICITY SWITCHING DATA 2009-2012*

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic switching rate</td>
<td>4.39%</td>
<td>6.61%</td>
<td>10.04%</td>
<td>11.63%</td>
</tr>
<tr>
<td>Nº domestic customers</td>
<td>26,280,450</td>
<td>26,555,315</td>
<td>26,654,921</td>
<td>26,740,386</td>
</tr>
<tr>
<td>Total switching rate</td>
<td>5.23%</td>
<td>7.42%</td>
<td>10.61%</td>
<td>12.07%</td>
</tr>
<tr>
<td>Nº all customers</td>
<td>27,113,874</td>
<td>27,406,461</td>
<td>27,505,927</td>
<td>27,593,863</td>
</tr>
<tr>
<td>% failed switches</td>
<td>8.79%</td>
<td>8.20%</td>
<td>5.98%</td>
<td>5.48%</td>
</tr>
</tbody>
</table>

* The calculated switching rates reflect the number of realized switches as a percentage of customer number during the analyzed period. In accordance with CEER 2010 GGP on Retail Market Monitoring Indicators, a switch is defined as “any change of supplier resulting from the customer choice”.

Table 13. Electricity Switching 2009-2012

Source: OCSUM.


- Effectiveness of competition

The Laws 12/2007 and 17/2007 gave CNE powers to supervise the degree of competition in the energy markets at wholesale and retail level. Pursuant to the 5th Additional Provision of the abovementioned legal pieces, CNE has to publish a yearly report to be submitted to the Ministry of Industry monitoring the degree of market opening which has to include regulatory proposals to foster competition.

Accordingly, on 13th September 2012 CNE published a report supervising the development of competition in the electricity and gas markets (period 2008-2010 and preview 2011).

During 2012, the degree of concentration of the retail market continued its slightly decreasing tendency shown in the past.

At the end of 2012, and based on the information provided by the five biggest Spanish distribution companies, Endesa still held the highest aggregate (last resort and free market) share in terms of both, number of customers and energy supplied, with market shares of 41% and 40%, respectively. Concerning the free market, Endesa still leads the free market (in terms of energy supplied) with a quote of 37%, though Iberdrola has increased its base of customers, surpassing the 4.7 million (48% of customers in the free market) by December 2012.²⁶

²⁶ Further information could be found at: [http://www.cne.es/cne/Publicaciones?id_nodo=344&accion=1&soloUltimo=s&slidCat=23&keyword=&auditoria=F](http://www.cne.es/cne/Publicaciones?id_nodo=344&accion=1&soloUltimo=s&slidCat=23&keyword=&auditoria=F).

19 July 2013
Monitoring the occurrence of restrictive contractual practices (Article 37(1)(k))

The Royal Decree-Law 13/2012 has incorporated this duty as one of CNE’s functions. CNE already performed this function but it has been reinforced. In particular, CNE will analyse specific cases following a complaint of the affected party.

Respecting contractual freedom with regard to interruptible supply contracts and with regard to long-term contracts (Article 37(1)(l))

The Royal Decree-Law 13/2012 has incorporated this duty as one of CNE’s functions. CNE intervenes after receiving a complaint as regards breaches of contractual freedom. This activity is performed under the framework of market monitoring activities.

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

o Recommendations on supply prices (Article 37(1)(o))

The power to issue recommendations on supply prices has not been transposed as such in Spain. However, 30th Function of CNE (as set forth by the Royal Decree-Law 13/2012) is aimed at monitoring the adequacy of prices and the terms and conditions of supply to customers in accordance to the Law.

Furthermore, pursuant to article 3 of the Directive 2009/72, “Member States may impose on undertakings operating in the electricity sector, in the general economic interest, public service obligations which may relate to security, including security of supply, regularity, quality and price of supplies and environmental protection”.

For more information on public service obligations related to prices, namely the system of end-user regulated tariffs, see section 5.

o Powers to carry out investigations and measures to promote effective competition (Article 37(4)(b))

Concerning the NRA’s powers to carry out investigations and impose measures to promote competition, the abovementioned Royal Decree-Law 13/2012 entitled CNE to monitor prices and supply conditions applicable to final consumers and verifies the compliance with Electricity Act 54/1997 and Hydrocarbons Act 34/1998 (30th Function).
CNE is entitled as well to monitor the level of transparency and competitiveness, including of wholesale prices, and the level and effectiveness of market opening and competition at wholesale and retail levels (Function 31st).

Periodically, CNE publishes in its website a set of competition monitoring reports on the wholesale and retail markets.

The Spanish legislation includes provisions and tools to avoid market abuse. The National Competition Commission is the body responsible for applying the Competition Act 15/2007, promoting and protecting the maintenance of competition in all the production sectors and throughout the national economy. The National Competition Commission and CNE cooperate in exercising their functions as set forth by Law 2/2011.

On the other hand, CNE is entitled to approve “Circulars” by which the information needed to carry out the monitoring functions is requested to the agents that operate in the electricity markets. These Circulars shall be published in the Spanish Official Gazette adopts information by-laws, which will have to be published, to request.

Additionally, suppliers have to comply with a set of rules concerning the supply contract (for more information see 3.2.2.1 regarding transparency).

Moreover, other important mean to promote competition is the price comparison tool mentioned in the previous section.

During 2012 there have been no significant mergers and acquisitions in the electricity sector.

However, further measures to avoid abuses of dominance adopted in 2012 include the followings:

On 21st June 2012, CNE approved some Resolutions establishing the lists of main and dominant operators in the energy sectors:

- Regarding electricity market, CNE declared and published the list of the five companies with major market shares (the so called “main operators”): ENDESA, S.A., IBERDROLA, S.A., GAS NATURAL SDG, S.A., HIDROELECTRICA DEL CANTABRICO, S.A and E.ONESPÁÑA, S.L.

- As for the natural gas market, the abovementioned main operators were the followings: GAS NATURAL SDG S.A., ENDESA, S.A., UNION FENOSA GAS, S.A., IBERDROLA, S.A. and HIDROELECTRICA DELCANTABRICO.
According to article 34 of Royal Decree-Law 6/2000 there is a limitation on the voting rights corresponding to shares in excess of 3% held by the same person in more than one company that ranks among the biggest five (in terms of market shares) in the corresponding market.

Additionally, on 21st June 2012 CNE published a list of operators with a market share of over 10% in various energy sectors (the so called “dominant operators”) including: ENDESA, IBERDROLA, EDP/HIDROCANTABRICO, GAS NATURAL FENOSA for the electricity market and GAS NATURAL FENOSA, ENDESA and UNION FENOSA GAS for the gas market and REPSOL-YPF and CEPSA for liquid fuels.

According to article 13 of Law 54/1997, dominant operators in the electricity market cannot import energy from outside MIBEL. Moreover, they can’t sell the energy generated by special regime generators on behalf of third parties that do not belong to their group (Royal Decree 661/2007 25th May).


**o Report on electricity tariff deficit**

**a) The origin of the electricity tariff deficit**

Since 2000 the revenues in the Spanish electricity system have not covered the costs of the system. Accordingly a subsequent deficit has arisen (the “Tariff Deficit”). In the chart you can see the evolution of average access income and access cost, as well as the evolution of tariff deficit.

As it can be seen, in the first years the deficit is originated by a difference between the energy forecasted cost included in the final tariff paid by the consumers and real cost in the market paid by the suppliers. In 2007, a new mechanism is introduced: ex ante deficit auctions. The access tariffs are set up lower than access costs and the difference is financed through the auction of the right to receive such amount with interests over 15 years. Finally, in 2009, the last resort supply is introduced and the energy cost stopped being a settlement cost. Since then, the tariff deficit arises because the access tariffs are set up below the access costs.
b) Access cost evolution

The difference between the energy forecasted cost and the real cost has an impact not only on the energy tariff component but also in some access components, for example premiums of renewable energy or extrapolaneous cost (this is a compensation to the generators in isolated systems, as Canary and Balearic systems).

The access cost that has increased most is the premium of renewable energy. This cost has increased more than 500% since 1998. In 1998, this cost represented the 9% of the total access cost and in 2012 is forecasted to reach 43% of the total access costs.

The extrapolaneous cost has increased an average of 57% in the period between 1998 and 2012. Finally, the annual payment of tariff deficit has multiplied nearly by 8 since 2003, when is introduced for the first time in the access cost.

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27 In Figure 11 (P) data corresponds to the Economic Memorandum of the Ministerial Order IET/843/2012 setting up the access tariffs as of April 1 2012.
c) Access tariffs evolution

On the other hand, the access incomes haven’t grown at the same pace. In the period between 2003 and 2012 the access tariffs were increased nearly 82% while the cost have increased nearly 230%.

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28 In Figure 12 (P) data corresponds to the Economic Memorandum of the Ministerial Order IET/843/2012 setting up the access tariffs as of April 1 2012.
### Access tariffs

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low voltage (&lt; 1 kV)</td>
<td>1.5%</td>
<td>1.7%</td>
<td>3.4%</td>
<td>-0.9%</td>
<td>-1.14%</td>
<td>3.6%</td>
<td>9.3%</td>
<td>8.9%</td>
<td>78.4%</td>
<td></td>
</tr>
<tr>
<td>2.0 A (Pc ≤ 10 kW)</td>
<td>1.5%</td>
<td>1.7%</td>
<td>4.2%</td>
<td>4.1%</td>
<td>-15.7%</td>
<td>46.3%</td>
<td>5.7%</td>
<td>10.8%</td>
<td>7.6%</td>
<td>88.3%</td>
</tr>
<tr>
<td>2.1 A (10&lt; Pc ≤ 15 kW)</td>
<td>1.5%</td>
<td>1.7%</td>
<td>-0.5%</td>
<td>-4.6%</td>
<td>-17.1%</td>
<td>33.0%</td>
<td>3.7%</td>
<td>7.0%</td>
<td>7.6%</td>
<td>119.7%</td>
</tr>
<tr>
<td>2.0 kWh (Pc ≤ 10 kW)</td>
<td>1.5%</td>
<td>1.7%</td>
<td>6.8%</td>
<td>-12.6%</td>
<td>-18.0%</td>
<td>53.0%</td>
<td>22.0%</td>
<td>4.8%</td>
<td>11.8%</td>
<td>37.6%</td>
</tr>
<tr>
<td>2.1 kWh (10&lt; Pc ≤ 15 kW)</td>
<td>1.5%</td>
<td>1.7%</td>
<td>1.9%</td>
<td>-12.0%</td>
<td>-17.3%</td>
<td>32.5%</td>
<td>22.0%</td>
<td>7.0%</td>
<td>11.8%</td>
<td>65.6%</td>
</tr>
<tr>
<td>3.0 A (Pc &gt; 15 kW)</td>
<td>1.6%</td>
<td>1.7%</td>
<td>2.6%</td>
<td>-18.6%</td>
<td>3.6%</td>
<td>55.2%</td>
<td>22.1%</td>
<td>2.0%</td>
<td>6.6%</td>
<td>92.0%</td>
</tr>
<tr>
<td>High voltage (&gt; 1 kV)</td>
<td>1.6%</td>
<td>1.7%</td>
<td>2.6%</td>
<td>-18.6%</td>
<td>3.6%</td>
<td>55.2%</td>
<td>22.1%</td>
<td>2.0%</td>
<td>6.6%</td>
<td>143.8%</td>
</tr>
<tr>
<td>3.1 A (1 kV a 36 kV)</td>
<td>1.6%</td>
<td>1.7%</td>
<td>2.8%</td>
<td>-0.9%</td>
<td>-2.7%</td>
<td>55.2%</td>
<td>18.2%</td>
<td>2.0%</td>
<td>6.6%</td>
<td>117.1%</td>
</tr>
<tr>
<td>6.1 (1 kV a 36 kV)</td>
<td>1.6%</td>
<td>1.7%</td>
<td>2.8%</td>
<td>-13.0%</td>
<td>6.4%</td>
<td>41.7%</td>
<td>26.8%</td>
<td>2.0%</td>
<td>6.6%</td>
<td>31.5%</td>
</tr>
<tr>
<td>6.2 (36 kV a 72.5 kV)</td>
<td>1.6%</td>
<td>1.7%</td>
<td>1.9%</td>
<td>-39.3%</td>
<td>3.1%</td>
<td>30.0%</td>
<td>25.0%</td>
<td>2.0%</td>
<td>6.6%</td>
<td>18.0%</td>
</tr>
<tr>
<td>6.3 (72.5 kV a 145 kV)</td>
<td>1.6%</td>
<td>1.7%</td>
<td>1.9%</td>
<td>-40.7%</td>
<td>-1.4%</td>
<td>25.7%</td>
<td>24.1%</td>
<td>2.0%</td>
<td>6.6%</td>
<td>-23.2%</td>
</tr>
<tr>
<td>6.4 (Mayor o igual a 145 kV)</td>
<td>1.6%</td>
<td>1.7%</td>
<td>1.9%</td>
<td>-48.7%</td>
<td>-8.0%</td>
<td>25.8%</td>
<td>0.0%</td>
<td>2.0%</td>
<td>6.6%</td>
<td>37.6%</td>
</tr>
<tr>
<td>TOTAL ACCESS TARIFFS</td>
<td>1.5%</td>
<td>1.7%</td>
<td>3.2%</td>
<td>-6.1%</td>
<td>-8.4%</td>
<td>37.9%</td>
<td>13.6%</td>
<td>7.3%</td>
<td>8.3%</td>
<td>81.6%</td>
</tr>
<tr>
<td>TOTAL ACCESS COSTS</td>
<td>20.8%</td>
<td>-4.2%</td>
<td>-16.9%</td>
<td>32.7%</td>
<td>23.1%</td>
<td>26.7%</td>
<td>6.3%</td>
<td>0.3%</td>
<td>11.2%</td>
<td>229.6%</td>
</tr>
</tbody>
</table>

*Table 14. Access tariffs evolution*

Source: Orders establishing electricity tariffs

**d) Financing the electricity tariff deficit**

Tariff Deficit has been financed primarily by incumbent electricity companies, which have subsequently been granted a credit right to receive such amount with interests over 8 to 15 years (“Tariff Deficit Receivables”). The annual payment of the tariff deficit is included in the tariff as an access cost.

The legislation allowed the securitisation of the credits arisen before 2006. The electricity companies could sell their tariff deficit receivables. In this case, the electricity companies had to look for a buyer and accept a discount over the set interest rates.

In 2007 a new mechanism was introduced: ex ante deficit auctions. The access tariffs are set up lower than access costs and the difference is financed through auctions for the right to receive such amount with interest over 15 years.

In 2009 the Royal Decree-law 6/2009 changed the financing system of the Tariff Deficit by setting up a Fund with the explicit guarantee of the Kingdom of Spain (FADE).

FADE has been created to allow the electricity companies to sell the Tariff Deficit Receivables to the Fund and to finance the tariff deficit in the capital markets.

FADE is an open-ended Fund which can buy Tariff Deficit Receivables and finance them by issuing Bonds with maturities up to 15 years.
FADE issued bonds for the first time on the 25th January 2011. Since then, 22 issuances have been made, both syndicate and private, for a total amount of €13.1 bn.

**e) Outstanding debt estimated as of 31st December 2012**

It is estimated that up to 31st December 2012, the electricity system owes a debt totalling €25.5 billion. The 57% of this amount (€14 billion) belongs to FADE and is guaranteed by the Kingdom of Spain. The 43% remaining is shared between the electricity companies (30%) and other creditors (13%).

An additional €7 billion may be absorbed by FADE.

![Figure 13. Share of tariff deficit](source: CNE.)

**f) Measures to solve the problem of electricity tariff deficit**

Since the beginning of 2012, the government has taken several measures to solve the problem of the tariff deficit:

- Royal Decree-Law 1/2012 suspended temporarily all new capacity registration in the special regime (i.e. renewable generation eligible for subsidies). This measure doesn't have any impact on the electricity tariff deficit in 2012.

- Royal Decree-Law 13/2012 reduced system costs up to €1,091 million while increased system revenues in €673 million (from IDAE and CNE budget surpluses).
In particular, the transmission and distribution network cost was reduced by €196 million and €689 million, respectively; the capacity payments and payments to interruptible customer, as well as coal subsidies were reduced a 10% and the system operator financing was integrated in energy component, through the prices charged to the agents that operate in the market.

The Increase in electricity bills as from 1 April 2012 to all customers of 5.1% on average resulting in a revenue increase for the system of €1,380 million.

- Further system cost reductions was introduced by Royal Decree-Law 20/2012 in 2012. Transmission network cost was reduced €50 million and the extra-cost of supplying small and isolated systems outside the peninsula was reduced €100 million.

- Law 15/2012, 27th December, of Fiscal Measures for Energy Sustainability established that part of the renewable energy premium will be financed by the General Budget of the State.

- Law 17/2012 concerning General Budget of the State includes provisions for financing of the renewable energy premium from the new energy taxes and the revenues generated from the auctioning of greenhouse gas emission allowances.
  In addition, the Law suspended the extrapeninsular compensation financing mechanism for extrapeninsular compensation costs in 2012.

- Royal Decree-Law 29/2012, 28th December, delayed until the inclusion of the definitive settlement on the access costs of the previous years’ electricity deficit.
3.3 Security of supply (if and in so far as NRA is competent authority)

o Implementation of safeguard measures (Art. 42)

No safeguard measures had to be taken throughout 2012.

3.3.1 Monitoring balance of supply and demand

o Monitoring of security of supply (Article 4)

CNE issues every year a “Framework Report on the coverage of demand in the electricity and gas sectors”. The last report concluded that there is enough generation capacity available to cover the peak demand in the four coming years (until 2016).

The electricity consumption on the Spanish peninsular system was 252,191 TWh in 2012, 1.2% lower than in 2011. Discounting the effects of temperature and labour patterns, the annual decrease was 1.7%, compared to a decrease of 1.3% registered in 2011.

The evolution of overall annual growth of consumption, from 2008 to 2012, is shown below:

![Figure 14. Rolling annual consumption growth in %](image)

*Source: REE*

The yearly maximum for hourly average demand and daily energy consumption were reached on 13th February with 43.01 GW and 8th February with 873 GWh respectively. These values were 4.2% and 3.7% lower than historical maximums registered in 2007.

Installed capacity in generating facilities showed a net growth of 2356 MW during 2012, reaching a total of 102.52 GW, representing an increase of 2.3% compared to the previous
year. The large majority of this increase comes from the new renewable facilities, mainly wind power (1122 MW) and solar (968 MW).

Current generation fuel mix and expected developments

The following chart and table show the shares by technology of installed generation capacity in the Spanish mainland system in 2012.

![Figure 15. Installed generation capacity in the Spanish mainland system at the end of 2012](Source: REE)

<table>
<thead>
<tr>
<th>Technology/Generation capacity (MW)</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCGT (Combined Cycle)</td>
<td>25.269</td>
<td>25.291</td>
</tr>
<tr>
<td>Fuel+gas (conventional)</td>
<td>1.492</td>
<td>1.492</td>
</tr>
<tr>
<td>Coal</td>
<td>11.700</td>
<td>11.620</td>
</tr>
<tr>
<td>Nuclear</td>
<td>7.777</td>
<td>7.853</td>
</tr>
<tr>
<td>Hydro (large)</td>
<td>17.563</td>
<td>17.761</td>
</tr>
<tr>
<td>Wind power</td>
<td>21.091</td>
<td>22.213</td>
</tr>
<tr>
<td>Solar</td>
<td>5.096</td>
<td>6.064</td>
</tr>
<tr>
<td>Other Special Regime</td>
<td>10.180</td>
<td>10.230</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100.168</strong></td>
<td><strong>102.524</strong></td>
</tr>
</tbody>
</table>

*Table 15. Installed generation capacity structure in the Spanish mainland electricity system*  
*Source: REE*
In 2012, total demand of power generation (including mainland and extra-peninsular demand) decreased around 1% down to 267.372 GWh, which was covered as follows:

<table>
<thead>
<tr>
<th>Balance of Spanish electric energy system</th>
<th>Energy 2011 (GWh)</th>
<th>Energy 2012 (GWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydro (large)</td>
<td>27.571</td>
<td>19.039</td>
</tr>
<tr>
<td>Nuclear</td>
<td>57.731</td>
<td>61.238</td>
</tr>
<tr>
<td>Coal</td>
<td>46.519</td>
<td>58.581</td>
</tr>
<tr>
<td>Fuel+gas (conventional)</td>
<td>7.479</td>
<td>7.578</td>
</tr>
<tr>
<td>Gas (Combined Cycle)</td>
<td>55.140</td>
<td>42.873</td>
</tr>
<tr>
<td>Special Regime</td>
<td>92.811</td>
<td>103.206</td>
</tr>
<tr>
<td>International Exchanges</td>
<td>-6.090</td>
<td>-11.430</td>
</tr>
<tr>
<td>Consumption in generation</td>
<td>-8.129</td>
<td>-8.743</td>
</tr>
<tr>
<td>Consumption in pumping</td>
<td>-3.215</td>
<td>-4.970</td>
</tr>
<tr>
<td>Total consumption</td>
<td>269.817</td>
<td>267.372</td>
</tr>
</tbody>
</table>

Table 16. Balance of the Spanish electricity system.
Source: REE

3.3.2 Monitoring investment in generation capacities in relation to Security of Supply

Duties and powers of the regulatory authority (Article 37(1)(r))

In the mentioned Framework Report on the coverage of demand in the electricity and gas sectors the investment on new generation capacities are followed-up (as well as decommissioning).

Changes in generation facilities under ordinary regime (i.e. conventional plants, other than RES-based or CHP):
Table 17. Changes in generation facilities under ‘ordinary regime’ commissioned in 2012.  
Source: REE.

<table>
<thead>
<tr>
<th>Type</th>
<th>MW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Puentes Garcia Rodriguez 5\textsuperscript{29}</td>
<td>21</td>
</tr>
<tr>
<td>San Esteban II</td>
<td>192</td>
</tr>
<tr>
<td>San Juan</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>216</strong></td>
</tr>
</tbody>
</table>

**Operational network security (Article 7 Directive 2005/89/EC)**

This reporting on operational network security is done in the context of the mentioned Framework Report by CNE.

The Operational Procedures for the power system 1.1. to 1.6 and 2.1. to 2.5 are devoted to operational network security uses.

**Investment in interconnection capacity for the next 5 years or more (Article 7 Directive 2005/89/EC)**

**Interconnection with France**

INELFE, the company jointly and equally owned by Red Eléctrica and its French counterpart, RTE, awarded contracts for the construction of the 400 kV electricity interconnection line between Spain and France (Santa Llogaia - Baixas) across the Eastern Pyrenees. In the section which crosses the border, approximately 70 km in length, the line will be underground and operated in Direct Current, which requires the construction of converter stations, one at each end of the line. Nowadays, the works are developing as scheduled.

The construction of this new interconnection, classified as a top priority by the European Union, will allow the present interconnection capacity between both countries to be doubled, increasing from 1.400 to 2.800 megawatts (6% of the maximum Spanish electricity demand), whereby the security of supply will be increased and it will permit the integration of a higher volume of renewable energy production. Similarly, this new line will guarantee the power supply in the province of Gerona and for the High Speed Train.

\textsuperscript{29} Repowering.
This project has now all the administrative authorisations needed for it to begin. Work started at the end of 2011, with power-up by the end of 2013 and entry into service by 2014. A complementary line in Spanish territory between Santa Llogaia and Bescanó has been proposed by REE as a candidate to PCI (Project of Common Interest) in the context of the Infrastructure Energy Regulation (Regulation 347/2013).

Ministers of Energy of Spain and France affirmed their willingness to increase the French-Spanish interconnection to at least 4,000 MW by 2020. For that purpose, the French and Spanish TSOs made a common proposal for a new subsea interconnection through the Gulf of Biscay. This project has been proposed as a PCI candidate too.

Interconnection with Portugal

The cross border capacity between Portugal and Spain reached 2,400 MW in 2012. The objective of reaching a commercial exchange capacity equivalent to 3,000 MW with Portugal is getting closer. A new interconnection project between Northern Portugal and Spain has been proposed as a PCI candidate.

More complementary projects will be completed in the coming years.

Interconnection with the Balearic Islands

The electricity interconnection between the Spanish peninsula and the Balearic Islands was concluded in the first half of 2011. The power interconnection HVDC-250 kV between Morvedre (mainland Spain) and Santa Ponsa 1 & 2 (Mallorca, Balearic islands) started to operate on the 14 of August 2012. This submarine interconnection is the first in Direct Current in Spain and the second in the world in which the cables run along the sea bed at depths of up to 1,485 metres. It involves a high voltage submarine interconnection composed of three cables (one return cable) 237 km in length. In 2012 this cable has transmitted 9% of total demand of the Balearic islands from mainland Spain which means around 450 GWh.

This electricity link is fundamental to assure and improve the reliability of the electricity supply in the Balearic system and, at the same time, allows its integration into the Iberian electricity market, which will facilitate the existence of a competitive electricity generation market on the islands.
Expected future demand and envisaged capacity for the next 5 years and 5-15 years (Article 7 Directive 2005/89/EC)

Based on the expectations contained in the report “Framework report on the coverage of demand in the electricity and gas sectors” that CNE issues annually, for the period 2013-2016 there is a high uncertainty about the evolution of the expected demand. However, due to the demand reductions in the last years, no demand coverage problems are expected.

The expected annual consumption and the peak demand for the period 2013-2016 are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Electricity consumption (TWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central Scenario</td>
</tr>
<tr>
<td>2013</td>
<td>249</td>
</tr>
<tr>
<td>2014</td>
<td>252</td>
</tr>
<tr>
<td>2015</td>
<td>257</td>
</tr>
<tr>
<td>2016</td>
<td>265</td>
</tr>
</tbody>
</table>

Table 18. Expected evolution of consumption (TWh) for the Spanish Mainland in the period 2013-2016.
Source: CNE and REE.

<table>
<thead>
<tr>
<th>Peak demand (MW)</th>
<th>Winter</th>
<th>Summar</th>
<th>Peak demand (MW)</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central Scenario</td>
<td>High Scenario</td>
<td>Central Scenario</td>
<td>High Scenario</td>
</tr>
<tr>
<td>2013 / 14</td>
<td>45.000</td>
<td>47.000</td>
<td>41.000</td>
<td>42.900</td>
</tr>
<tr>
<td>2014 / 15</td>
<td>44.200</td>
<td>47.000</td>
<td>40.100</td>
<td>43.900</td>
</tr>
<tr>
<td>2015 / 16</td>
<td>44.800</td>
<td>48.000</td>
<td>40.700</td>
<td>45.900</td>
</tr>
<tr>
<td>2016 / 17</td>
<td>46.100</td>
<td>49.600</td>
<td>42.000</td>
<td>45.500</td>
</tr>
</tbody>
</table>

Table 19. Expected Peak Demand (MW) for the Spanish Mainland in the period 2013-2016.
Source: Promoters, CNE and REE.

As regards the envisaged capacity to be installed, no significant new capacity is expected.

On the other hand, the generation groups in the “20,000 hours of functioning plan” have the compromise to disconnect in year 2015. In the following table the expected available capacity for the period 2013-2016 is shown. Note that expected available capacity does not match expected installed capacity since, for security reasons, some restrictive assumptions about the availability of installed capacity are taken into account in order to calculate reserve margin rate.

---

30 According to art 4.4 a) of the Large Combustion Plant Directive, the existing plants may be exempted from their inclusion in the national emission reduction plan if the operator of the plant undertakes, in a written declaration to the competent authority, not to operate the plant for more than 20,000 operational hours starting from 1 January 2008 and ending no later than 31 December 2015.
### Capacity (MW)

**Winter**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Hydro</td>
<td>9.554</td>
<td>9.558</td>
<td>9.558</td>
<td>9.558</td>
</tr>
<tr>
<td>Fuel/Gas</td>
<td>430</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>CCGT</td>
<td>22.412</td>
<td>22.412</td>
<td>22.412</td>
<td>22.412</td>
</tr>
<tr>
<td>Special Regime Renewable</td>
<td>3.927</td>
<td>3.927</td>
<td>3.927</td>
<td>3.927</td>
</tr>
<tr>
<td>Special Regime NO Renewable</td>
<td>4.967</td>
<td>4.967</td>
<td>4.967</td>
<td>4.967</td>
</tr>
<tr>
<td>Balance Exchange Peak</td>
<td>-1.850</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Standby Power</td>
<td>-2.000</td>
<td>-1.600</td>
<td>-1.600</td>
<td>-1.600</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>54.108</strong></td>
<td><strong>55.733</strong></td>
<td><strong>55.506</strong></td>
<td><strong>55.506</strong></td>
</tr>
</tbody>
</table>

**Summer**

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Hydro</td>
<td>7.386</td>
<td>8.065</td>
<td>8.068</td>
<td>8.068</td>
</tr>
<tr>
<td>Fuel/Gas</td>
<td>430</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Special Regime Renewable</td>
<td>6.756</td>
<td>6.756</td>
<td>6.756</td>
<td>6.756</td>
</tr>
<tr>
<td>Special Regime NO Renewable</td>
<td>4.967</td>
<td>4.967</td>
<td>4.967</td>
<td>4.967</td>
</tr>
<tr>
<td>Balance Exchange Peak</td>
<td>-1.900</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Standby Power</td>
<td>-2.000</td>
<td>-2.400</td>
<td>-2.400</td>
<td>-2.400</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>53.766</strong></td>
<td><strong>55.316</strong></td>
<td><strong>55.092</strong></td>
<td><strong>55.092</strong></td>
</tr>
</tbody>
</table>

*Table 20. Expected firm available capacity installed in winter and summer. Period 2013-2016.*

*Source: Promoters, REE and CNE.*

As it can be seen in the table below no capacity constraints are expected in the period 2013-2017. All Coverage Demand Index are above 1.2 in the central demand scenario.

### Reserve margin rate - winter

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Central demand scenario</td>
<td>1.26</td>
<td>1.26</td>
<td>1.24</td>
<td>1.20</td>
</tr>
<tr>
<td>High demand scenario</td>
<td>1.26</td>
<td>1.19</td>
<td>1.16</td>
<td>1.12</td>
</tr>
</tbody>
</table>

### Reserve margin rate - summer

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central demand scenario</td>
<td>1.38</td>
<td>1.38</td>
<td>1.35</td>
<td>1.31</td>
</tr>
<tr>
<td>High demand scenario</td>
<td>1.38</td>
<td>1.29</td>
<td>1.25</td>
<td>1.21</td>
</tr>
</tbody>
</table>


*Source: Promoters, REE and CNE.*
3.3.3 Measures to cover peak demand or shortfalls of suppliers

o Monitoring of security of supply (Article 4)

In case some demand has to be curtailed, there is a service provided by some consumers called “interruptible demand”. In 2012, demand coverage in Spain did not experience any problem so no demand had to be curtailed. The revenue regime for this service has been revised in 2012 by Order IET/2804/2012, of 27th December. The reason for reviewing this regime was the low demand and high penetration of renewable generation.

On the 5th of December 2012 CNE approved a proposal for a new capacity remuneration mechanism. This proposal that was sent to the Minister, foresees a market based approach to remunerate capacity and includes the possibility of mothballing (“hibernation”) power plants where generators consider the capacity payments insufficient or when capacity is not assigned in auctions.

No other measures have been planned nor implemented in this regard since peak demand in the last years has been below generation capacity available. Please, refer to the previous points.
4 THE GAS MARKET

4.1 Network regulation

4.1.1 Unbundling

o Designation and certification of transmission system operators (Articles 10, 11 2009/72/EC and Article 3 Regulation (EC) 715/2009

The Royal Decree-Law 13/2012 sets forth that CNE will be in charge of the certifications procedure as foreseen by the Directive and establishes the models for gas TSO unbundling in Spain:

- The unbundling model adopted for the main TSO (ENAGAS, with more than 95% of national transport pipelines) is “Ownership unbundling”.
- Small gas TSOs in Spain can opt between the Ownership unbundling model or the ISO model.
- CNE will be in charge of the certification procedure as foreseen by the Directives.

At the date of elaboration of this report, the significant shareholders of ENAGAS, S.A. are those shown in the following table:

<table>
<thead>
<tr>
<th>ENAGAS shareholders</th>
<th>% total shareholding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oman Oil Holdings Spain</td>
<td>5.00</td>
</tr>
<tr>
<td>Kartera 1 (Kutxa Bank)</td>
<td>5.00</td>
</tr>
<tr>
<td>SEPI</td>
<td>5.00</td>
</tr>
<tr>
<td>Free Float</td>
<td>85.00</td>
</tr>
</tbody>
</table>

Table 22. Shareholding structure of ENAGAS.
Source: ENAGAS website.

In view of the shareholding structure, article 11 of the Directive 2009/73/EC is not applicable since ENAGAS is not controlled by persons from a third country.
Transmission system operator unbundling requirements

The Hydrocarbons Act designated one company, ENAGAS, which was already the owner of the majority of transmission infrastructures, to be the independent transmission system operator.

Royal Decree–Law 6/2009, modifying article 67 of the Hydrocarbons Act 34/1998, consolidated ENAGAS, the independent transmission system operator, as the sole owner of the main network of primary transmission of natural gas (for new infrastructures).

On top of the general legal and functional unbundling requirements between regulated and unregulated activities within a group, there are further functional unbundling and accounting separation requirements applicable to ENAGAS. Furthermore, in order to guarantee TSO’s independence, the law limits share capital ownership and voting rights in ENAGAS.

Thus a single person or society cannot, directly or indirectly, own more than 5% share capital or use more than 3% of voting rights. For gas companies the limit drops to 1% of voting rights. There is also an aggregate limit of 40% share capital for gas companies. These limits do not apply to State ownership.

As for the functional unbundling requirements, in order to separate operation of the system from transport, the 2007 Act, amending former 20th Additional Provision of the Hydrocarbons Acts, requested ENAGAS to create a unit integrated within the same company to be entrusted with the operation of the System. This unit had to implement accounting and functional unbundling for other activities (transport) and its workforce had to sign a code of conduct to guarantee its independence from all other activities.

However, in 2011, Law 12/2011 has modified the Hydrocarbons Act and has required ENAGAS to transfer the operation of the transmission system and the actual transport (with the ownership of the assets) into two different companies within the group. Existing equity limits will be applicable to the holding company that owns 100% of those companies.

ENAGAS reports in his web page the agreements adopted in the Shareholders' General Meeting celebrated on March 30, 2012, amongst them the agreements in relation to the segregation of the activities of transport and technical management of the system in fulfilment of the legal mandate imposed in the Law 12/2011, of May 27. Concretely ENAGAS approved the project of segregation of the company in two new companies, namely, ENAGAS TRANSPORTS, S.A.U. and ENAGAS GTS, S.A.U., the first one shall be responsible of the function of transmission and the second one of technical management of the gas system (i.e. system operation).
The Royal Decree-Law 13/2012 establishes that the independent system operator shall keep separate accounts for every managed company, specifying those revenues and expenses attributable to the mentioned management.

**o Unbundling of distribution system operators (Article 26)**

**TSO certification**

Regarding the main TSO, ENAGAS, requested the certification as a Transmission System Operator on 4th November 2011. The Board of National Energy Commission (CNE), in its meeting dated 19th April, 2012, issued a preliminary certification decision of ENAGAS according to article 63 bis of Hydrocarbons Act (Law 34/1998, of October 7th), amended by Royal Decree-Law 13/2012, of March 30th. Pursuant to the mentioned article 63 bis, CNE proceeded to notify the preliminary decision on the certification of ENAGAS as TSO to the European Commission and on June 15th 2012, the EC sent its opinion on this preliminary decision. CNE drafted its final decision and in its meeting dated 26th July 2012, issued the definitive certification for ENAGAS subject to the fulfilment of certain conditions. The definitive certification has been notified to the EC.

In its meeting dated 18th April 2013, the Board of CNE has monitored the compliance of the conditions set in the definitive certification decision, resolving that ENAGAS has adopted the measures needed to fulfil the unbundling requirements. This decision adopted 18th April 2013 has also been notified to the EC.

Regarding other TSO certifications, Reganosa requested the certification under the Ownership unbundling model on 31st July 2012. In its preliminary decision, CNE, in its meeting held on 13th December 2012, has stated that the issue of the certification has to be rejected unless Reganosa adopts certain measures to comply with unbundling requirements. On February 2013, the European Commission sent its favourable opinion on this preliminary decision. Eventually, the Board of National Energy Commission (CNE) in its meeting dated 4th April 2013, issued its final decision rejecting the certification under the ownership unbundling model.


Regarding certification revisions, pursuant the Law 13/2012, CNE will monitor the fulfilment of the unbundling requirements as well as in general, will ensure that transporters and distributors fulfilled with the obligations set out by the Spanish regulation and for the accurate application of European regulation.
Provisions regarding branding and resources

The Spanish Hydrocarbons Act 34/1998 establishes the current unbundling regulatory framework for natural gas and the legal, functional and accounting unbundling requirements. Law 12/2007 amended article 63 of the Hydrocarbons Act, so as to adapt it to articles 9 and 13 of Directive 2003/55/EC. This article establishes the legal and functional unbundling requirements applicable to all regulated activities including distribution and transport.

The Royal Decree-Law 13/2012 amends the article 63 of the Hydrocarbon Act again to adapt it to article 26 of Directive 2009/73/EC. The new wording establishes further unbundling requirements such as those persons responsible for the management of the distribution undertakings cannot participate in company structures of the natural gas undertaking responsible, directly or indirectly, for the day-to-day operation of transmission and vice versa. Moreover, where the distribution undertaking is part of a vertically integrated undertaking, it is required that the distribution undertaking shall not, in their communication and branding, create confusion in respect of the separate identity of the supply branch of the vertically integrated undertaking.

In execution of its general powers and before a more explicit supervision function was finally attributed, CNE approved on the 5th of July 2012 a report on a first follow-up of the compliance programme (code of conduct for unbundling activities) and the annual report setting the measures taken in 2008, 2009 and 2010 by undertakings to ensure compliance with functional unbundling obligations.

CNE states in the above mentioned report that the distribution system operators have already established their compliance programme. So, undertakings have incorporated provisions with the aim to guarantee, with different degrees, their compliance with the functional unbundling obligations established by the law, in accordance with different interpretations adopted by the undertakings.

The Royal Decree-Law 13/2012, of 31 March, has introduced an explicit and clear new function for CNE, consisting of monitoring of the functional unbundling among the activities of transmission, regasification, distribution, storage and supply in the gas sector.

At the time of the drafting of this report, CNE is now in the process of preparation of its first formal report on the supervision of unbundling, in execution of the aforementioned explicit function. Hence, CNE will monitor the implementation of measures, including those foreseen in the Royal Decree-Law 13/2012:

- measures taken to ensure that vertically integrated distribution system operators shall not, in their communication and branding, create confusion in respect of the separate identity of the supply branch of the vertically integrated undertaking and,
measures taken to ensure that persons responsible for the management of distribution system operator do not participate in company structures of the natural gas undertaking responsible, directly or indirectly, for the day-to-day operation of transmission and vice versa.

**Legal and functional unbundling for DSO**

Article 63 of the Hydrocarbons Act (as modified in 2007) states that companies that engage in one or more regulated activity – regasification, strategic storage, transmission and distribution – must have as their sole corporate purpose the performance of such activities. Therefore, they may neither engage in production or commercialization nor be shareholders in companies that carry out such activities. Likewise, it provides that transmission companies that operate any of the basic network facilities of natural gas must have as their sole corporate purpose in the gas industry the transmission activity.

The law establishes that a group of companies may undertake activities that are incompatible, provided they are performed by different corporate entities and meet a number of conditions criteria to guarantee the functional unbundling. These include management separation and measures relating to effective decision-making rights in accordance with the 2003 Directive.

Article 63 of the Hydrocarbons Act (as modified in 2007) states the current unbundling regulatory framework for natural gas and the legal, functional and accounting unbundling requirements for DSO.

Article 63 of the Hydrocarbons Act sets forth that an annual report, setting out the internal code of conduct and the measures taken by each regulated company in order to implement the unbundling requirements, should be sent to CNE and the Ministry for approval and shall be published.

Since 2008, vertically integrated energy companies have implemented their compliance programs and submitted required reports on the unbundling measures they have adopted to CNE and to the Ministry. The process is monitored by CNE.

Among the measures adopted and explained in the aforementioned reports, the following are worthy of note:

- Measures related to the reorganization of the legal companies that form part of the vertically integrated undertaking including the transfer of assets, personnel and share holdings in order to comply with unbundling requirements.
- The modification of the job functions of certain workers, and of the persons in charge of the management of the regulated activities.

- Reference to measures still being carried out as well as planned for the next years;

- Revision of the remuneration and contracts of persons in charge of the management of regulated activities;

- Obligation for persons in charge of the management of the regulated firms to sign a formal declaration declaring that they do not own shares or other participations in undertakings which carry on production or supply activities;

- With respect to commercially sensitive information:
  - revision of procedures of access to that information,
  - introduction of confidentiality clauses in contracts with third parties,
  - designation of persons in charge of the custody of information,
  - incorporation of disciplinary measures for any breach of the code on separation of activities.

**Unbundling and transparency of accounts**

The amended article 62 of the Spanish Hydrocarbons Act, which adapts article 17 of the Directive 2003/55/EC, establishes the accounting and reporting requirements for gas companies.

Entities that engage in one or more natural gas activities shall keep their accounts in accordance with Title VII of the Capital Company Law. Companies involved in regulated activities shall, in their internal accounting, keep separate accounts for each of their regulated activities specifying those revenues and expenses strictly allocated to each activity. This rule also applies to the Technical Manager of the System and to last resort suppliers.

Undertakings must explain in the annual report the criteria for the allocation of assets and liabilities, expenditures and incomes.

Companies that carry out deregulated gas-related activities shall keep separate accounts for production and sales, and likewise for any other non-gas-related activity they may be involved in within the Spanish territory, and any others they may perform abroad.

The gas undertakings must comply with any information requirements of CNE, especially with regard to any gas provisioning and supply contracts they may have entered into and
in relation to on their annual accounts and shall, in particular, make sure that the obligation to avoid discrimination and cross-subsidies is respected.

In case of vertical undertakings, the obligation to inform shall also apply to the parent company, if it carries out operations in any energy sector, and to other group companies that are engaged in operations with the gas subsidiary.

The Ministry of Industry, Energy and Tourism and CNE receive, by virtue of Order ITC/1548/2009, regular accounting and economic-financial information. The Order establishes that the information must be presented separately for the following activities: regasification, storage, transmission, gas trading, Technical Manager of the Gas System, distribution, sales to tariff-based customers, retailing, other gas activities and other activities.

Companies are audited by independent companies according to the current regulation. In addition, the Spanish Hydrocarbons Act assigns specifically to CNE the function of verifying the effective unbundling of accounts.

4.1.2 Technical functioning

o Balancing services (Article 41(6)(b), Article 41(8)

o Security and reliability standards, quality of service and supply (Article 41(1)(h))

The Royal Decree-Law 13/2012, of March 30th, attributes CNE new duties and powers, among other, the establishment through efficient, transparency, objectivity and non-discriminatory criteria, the methodology regarding the provision of balancing services providing the appropriates incentives for network users to balance their input and off-takes of the gas system as well as the methodology to calculate rates, tolls and fees for transport and distribution, regasification, storage and tank truck fill-up.

Reliability and operational rules of the Spanish system are set by the System Operation Network Code (NGTS). CNE published a monthly monitoring report on technical and operational aspects of the gas system. This report contains data about relevant facts, the demand evolution, entry management, entry-exit balancing, level of stocks, technical minimums, maintenance of facilities and follow-up of the modifications of the System Operation Network Code (NGTS).
Balancing

Regarding balancing services, there is a provision in Spanish regulatory regime that aims at assuring security of gas supplies to consumers on a daily basis, which is contained in the rule 9 of the System Operation Network Code (NGTS). This provision establishes the obligation for all users to be balanced after their operations in the network, and introduces economic penalties to those users incurring in imbalance. This guarantees an appropriate behaviour of gas suppliers enhancing a safe operation of the gas system by the Technical Manager of the System.

Security of supply and reliability rules

Another new overseeing function assigned to CNE (26th Function) by the Royal Decree-Law 13/2012, it is monitoring of compliance with network security and reliability rules.

NGTS 09 of Spanish Network Code establishes the general criteria relating to the systems and procedures of measurement made in order to determine the quantity and quality of gas flows in all those points of gas system that is legally enforceable or is deemed necessary, such as transmission network entries and exits, connection points of distribution networks and supply points. Detailed protocol PD-01, which develops NGTS 09, establishes natural gas quality specifications.

Regarding strategic reserves, CNE and CORES monitors the obligations regarding strategic storage and diversification of origins of gas imports.

Monitoring time taken to connect and repair (Article 41(1)(m))

Article 3 of the Hydrocarbons Act, stated that CNE shall oversee the time spent by transporters and distributors in establishing connections and making repairs. This mandate, that already existed, has been incorporated as a duty for CNE by the Royal Decree-Law 13/2012 (20th Function). For these purposes, CNE has to ensure adequate publication of information required by managers on the transmission network and where appropriate, distribution on interconnections, the use of the network and the allocation of capacity to interested parties.

The Technical Manager of the Gas System publishes a daily report of operation which includes forecasts and uses of facilities of regasification, storage, international connections and, in general, the operation of all installations of the basic network and the secondary transport made by different holders. It also publishes an operation note when something disturbs or may disturb the normal operation of the system, such as an incident for break of a pipeline in a transmission or distribution network or a situation of exceptional operation generated by a cold snap. This note includes information on each event: date, scope,
influence in the normal operation of the system, consumers affected, measures adopted, time to repair the outage, in case, etc.

The Spanish Network Code includes for operators of the networks of the Basic Network and transmission a yearly obligation for providing information about the maintenance plan of their facilities to the rest of the agents. This plan must contain the program of the activities which require or can cause operative restrictions in their facilities for the following year, including, at least, type of contribution or maintenance, facility, consumers and other affected agents, proposed date and estimated duration, consequences on the operation and the supply.

One of the functions of CNE (13th Function) is to solve disputes with regard to the contracts for third party access to the transmission and distribution networks on any terms that may be set in regulations. In this context, CNE has solved many disputes related to technical and economical conditions of the connection between a distributor of a new distribution network and the transporter who owns the existing transmission network where distribution facilities must connect.

The application to connect a new customer to the gas grid shall be submitted to the distribution company which shall perform all the processes as required within a time frame of no more than six working days (from de completion of the grid connection or from the completion of the consumer’s individual gas installations if they were not ready at the time of the request).

**o Monitoring access to storage, linepack and other ancillary services (Article 41(1)(n))**

Article 3 of the Hydrocarbons Act, stated that CNE shall oversee the storage aspects requirements. This mandate, that already existed, has been incorporated as a new duty for CNE by the Royal Decree-Law 13/2012 (23th Function) to monitor the access conditions to storage, including underground storage, LNG storage tanks and linepack, and other ancillary services.

In Spain, there is plenty of available capacity in all (six) LNG import terminals, so the free capacity is allocated in a first come - first serve basis. The access to the regasification plants is subject to regulated TPA.

The linepack (of the transport grid) is assigned to the traders that books entry capacity to the gas transport grid (proportionally to the capacity booked).

TSOs must publish in its web page monthly information on unloading of ships, gas to be unloaded and free unloading slots. Demand and operational information is also available,
together with capacity. Market players must provide their annual, quarterly, monthly and
daily forecasts to TSO about the operations they plan to execute.

The Ministerial Order ITC/3862/2007 of 28 December, the Ministerial Order ITC/3128/2011
of 17 November and the Ministerial Order IET/849/2012 of 26 April, established a yearly
mechanism for the allocation of underground storage capacity for natural gas to their users
for each annual period from the 1 April of the current year to the 31 March of the following
one.

There are diverse criteria for underground storage capacity allocation:

- Part of the capacity is allocated to the supplying companies in proportion to their
final sales in the previous year, and the remaining capacity is allocated by an
auction mechanism.

- The remaining capacity not allocated through the auction mechanism is allocated
according to the agents’ capacity requests communicated to the System Technical
Manager\(^{31}\).

- In case there is still capacity left, this will be allocated under “first-come-first-served”
criteria.

The general rules of the auction procedure are established by Resolution of 14 March
2008, by the State Secretariat for Energy, which outlines certain aspects relating to the
management of underground storage facilities of the basic network and lays down the
rules for auctioning their capacity. The conditions and specific rules of the yearly auction
are established every year in a Resolution of the General Directorate of Energy Policy and
Mining of the Ministry of Industry, Energy and Tourism. CNE is the supervisory body for
these auctions and the Spanish power exchange (Operador del Mercado Ibérico de
Energía, Polo Español, S.A. -OMIE)\(^{32}\) is the institution responsible for organising them.

The following table summarises the results of the auctions held in 2009, 2010, 2011 and
2012. The auction corresponding to the period 1 April 2013 – 31 March 2014 was held on
26 March 2013.

\(^{31}\) Such a function is performed by Enagás, S.A., whose role in Spanish is known as GTS (“Gestor Técnico del Sistema).

\(^{32}\) Through its subsidiary OMEL Diversificación S.A.U. from 2009.
<table>
<thead>
<tr>
<th>Type</th>
<th>Multi-round ascending-price, electronic mechanism</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date</strong></td>
<td><strong>Allocated capacity (GWh)</strong></td>
</tr>
<tr>
<td>30 March 2009</td>
<td>4,257</td>
</tr>
<tr>
<td>25 March 2010</td>
<td>7,397</td>
</tr>
<tr>
<td>29 March 2011</td>
<td>8,874</td>
</tr>
<tr>
<td>27 March 2012</td>
<td>3,822</td>
</tr>
<tr>
<td><strong>Supply period</strong></td>
<td></td>
</tr>
<tr>
<td>1 April 2009 - 31 March 2010</td>
<td></td>
</tr>
<tr>
<td>1 April 2010 - 31 March 2011</td>
<td></td>
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<tr>
<td>1 April 2011 - 31 March 2012</td>
<td></td>
</tr>
<tr>
<td>1 April 2012 - 31 March 2013</td>
<td></td>
</tr>
<tr>
<td><strong>Capacity price (TPA rate added)</strong></td>
<td></td>
</tr>
<tr>
<td>6,603 €/GWh per year</td>
<td>3,932 €/GWh per year</td>
</tr>
<tr>
<td>832 €/GWh per year</td>
<td>4,932 €/GWh per year</td>
</tr>
</tbody>
</table>

Table 23. Auctions for underground storage of natural gas: results of auctions between 2009 and 2012

Source: Auction administrator and CNE

**Monitoring correct application of criteria that determine model of access to storage (Article 41(1)(s))**

Article 3 of the Hydrocarbons Act stated that CNE shall oversee the storage aspects requirements. This mandate, that already existed, has been incorporated as a new duty for CNE by the Royal Decree-Law 13/2012 (23th Function) to monitor the access conditions to storage, including underground storage, LNG storage tanks and linepack, and other ancillary services.

In Spain there are six LNG regasification plants and four UGS (underground storage). All of them are subject to regulated TPA, allowing the access to new capacity by new entrants. TPA access is regulated in Royal Decree 949/2001. In accordance with the provisions of that Royal Decree, standardized models of formal request for access to the installations of gas system were developed by CNE and approved by the Directorate-General for Energy Policy and Mines. When an application is rejected, the owner of the installation must communicate the decision to the Directorate General for Energy Policy and Mines and CNE.

Standardized models of contracts for access to the system installations were also approved. The owners of facilities have the obligation to submit, prior to 20 January of each year, a summary of all the contracts signed in the previous year to the Directorate-General for energy policy and mines of the Ministry of Economy, CNE and the TSO.

Underground storage capacity allocation has been explained in the previous point.
Monitoring safeguard measures (Article 41(1)(t))

Article 101 of the Hydrocarbons Act states that the Government shall lay down the conditions for emergency situations in which the strategic reserves of natural gas may be used by those under the obligation to maintain such reserves. For this purpose, Royal Decree 1716/2004 states that emergency situations shall be those cases where due to circumstances that are outside the control of one or all of the agents intervening in the gas system, an obvious risk occurs or exists that a situation of shortage or scarcity of supply may happen with regard to firm gas supplies as well as whenever the safety of people, equipment or installations may be affected or the integrity of the gas network. In these cases, to deal with situations of emergency or supply scarcity and without prejudice to the use of the stocks pursuant to point 3 of this article, the Government may adopt one or more of the following measures:

a) Limit or modify temporarily the gas market.

b) Lay down special obligations concerning minimum security stocks of natural gas.

c) Suspend or modify temporarily the access rights to installations by third parties.

d) Modify the general conditions of supply regularity generally or referring to certain categories of consumer.

e) Make the sales of natural gas for its consumption abroad subject to administrative authorisation.

f) Any other measures that might be recommended by the international organisations of which Spain is a member or that may be determined to implement those conventions it is party.

The Government shall notify the measures adopted to the Commission and to the other Member States.

Besides that, the Government shall encourage cooperation with third countries to develop coordination mechanisms to deal with situations of emergency or supply scarcity, just as in compliance with the obligations derived from the international commitments acquired.

Spanish Network Code (NGTS) was approved by Ministerial Order ITC/3126/2005. The purpose of NGTS is to set out the procedures and mechanisms for the technical management of the system and coordinate the activities of all the agents involved in the system in order to guarantee the proper technical functioning of the gas system and the continuity, quality and security of the supply of natural gas and piped manufactured gases.
whilst abiding by the principles of objectivity, transparency and non-discrimination. The application of the Code is monitored by CNE.

In 2012, there was no need to take any of these safeguard measures.

4.1.3 Network and LNG tariffs for connection and access

o Duties and powers of the regulatory authority on Article 41(1)(a), Article 41(6)(a), Article 41(8), Article 41(10) and Article 41(12)

In 2012, the Government approved rates, tolls and fees of natural gas (previously, the NRA issues a non-binding report) and published them in the Spanish Official Gazette. The tariff model for transmission applied in Spain is the entry-exit model with a single balancing area. In addition regulated rates for LNG facilities and underground storage are applied. For 2012, Order IET/3587/2011, dated December 30th, established rates, tolls and fees of natural gas from 1st of January to 27th of April, and Order IET/849/2012, dated April 26th established rates, tolls and fees of natural gas for the rest of the year.

The Royal Decree-Law 13/2012, of March 30th, attributes CNE new duties and powers, among other, the establishment through efficient, transparency, objectivity and non-discriminatory criteria, the methodology to determine rates, tolls and fees for transport and distribution, regasification, storage and tank truck fill-up.

CNE is currently developing the methodologies to calculate rates, tolls and fees for transport and distribution, regasification, storage and tank truck fill-up, in accordance with the European and Spanish legislation. On 26th November 2012, as part of the work initiated by CNE for developing the aforementioned methodology, CNE has launched a public consultation document, with a view to receiving comments from the stakeholders on the different alternatives that exist to establish the natural gas tolls and fees. CNE will submit the final proposal to the stakeholder’s consideration before approval

o Prevention of cross-subsidies (Article 41(1)(f))

Cross-subsidies between transmission, distribution, storage, LNG and supply activities are avoided by the implementation of the accounting unbundling rules and the monitoring by CNE of the fulfilment of these obligations.

Additionally, regarding accounting and reporting, the Royal Decree-Law 13/2012 adds to the auditing requirements, the obligation of checking the fulfilment of the obligation to avoid cross-subsidies among regulated activities and among regulated and liberalized activities.
CNE requires companies operating in the electricity and gas sectors to supply their Balance Sheet, Profit and Loss Account and the rest of their financial statements, with separate accounts. Companies have to report the incomes, costs, assets and liabilities that relate to each activity quarterly. CNE uses this information to supervise that subsidies don’t take place between regulated and liberalized activities. In addition to this, CNE analyses the financial and economic health of companies operating in the electricity and gas sectors.

On July 5th 2012, CNE Board has approved CNE Follow-up Report on the Behaviour Code and Measures on Unbundling adopted in 2008, 2009 and 2010 which analyses the measures adopted in order to ensure the fulfillment with the functional unbundling.

As mentioned before, the methodology to be used in tariff regulation is currently under development.

**o Regulated and negotiated access to storage 41(1)(s)**

Natural gas undertakings have a right to access to storage on the basis of regulated access with public TPA tariffs approved by the Ministry of Industry, Energy and Tourism.

Each year, all the capacity of the underground storage, from April – to March next year, is assigned to natural gas undertakings according with their obligations of maintenance of strategic gas storage (equivalent of 20 days of the gas demand supplied). The remaining capacity is allocated through capacity auctions.

**4.1.4 Cross-border issues**

**o Access to cross-border infrastructure including allocation and congestion management (Article 41(6)(c), Article 41(8), Article 41(9), Article 41(10) and Article 41(12))**

The Royal Decree-Law 13/2012 sets forth that CNE will approve the methodologies to access to cross-border infrastructures, including the procedures for the allocation of capacity and congestion management, according to the general framework defined in the Hydrocarbons Act (Law 34/1998) and its implementing regulation. This methodology will be developed according to the European network codes on capacity allocation and congestion management.

This new competence should facilitate the implementation of the cross-regional roadmaps on which CNE is already working nowadays in the framework of the ACER Regional Initiatives.
Cross border cooperation

The Work Plan 2011-2014 for the South Gas Regional Initiative (SGRI) includes a joint study, by CNE and ERSE, on cross border access tariffs in gas interconnections between Spain and Portugal, with the aim of identifying measures to promote tariff harmonization and to remove other obstacles to the internal gas trading.

Cross border tariffs harmonization is an important topic for the improvement of market integration in the Iberian gas market, along with other developments also included in the priorities of the SGRI Work Plan.

A public consultation on cross border tariffs harmonization between Portugal and Spain was launched on the 18th of January 201233, aimed at collecting stakeholders’ views on the conclusions of the study presented by the Spanish and Portuguese Regulators and also on the most needed developments concerning tariff harmonization, both in the short term and the longer term.

A large share of the stakeholders in the gas markets of Portugal and Spain participated in the public hearing: shippers, suppliers and TSOs, comprising a total of 14 comments from 16 different stakeholders. Stakeholders’ comments and a summary of such comments were published on both Spanish and Portuguese Regulators’ and ACER’s web sites34.

Having analyzed and described the comments received to the public hearing on cross border tariffs between Spain and Portugal, some conclusions may be raised.

Harmonization of CAM, CMP and balancing rules, apart from cross border tariffs, were listed as the main focus of the harmonization efforts, as well as the implementation of the common licensing procedures for suppliers in the MIBGAS area, as proposed by regulators.

In this respect, Regulators shall work on a common position on regulatory developments, considering the comments received in the present public hearing, the priorities set by the SGRI and the European Commission and the work on the network codes. This task is a deliverable included in the SGRI work plan.

The Spanish Regulator is working on the methodology for the determination of an entry-exit tariff system in Spain, aimed at determining sufficient, non-discriminatory and cost-reflective tariffs. However, other tasks could be harmonized, as those measures pointed out by the stakeholders.

33 http://www.cne.es/cne/doc/publicaciones/CrossBorderTariffAnalysisinMIBGAS.pdf
34 http://www.cne.es/cne/doc/publicaciones/CBT_Analysis_in_MIBGAS.pdf
Next, Regulators shall build a common proposal on the steps to implement a more integrated market, namely on the issue of cross border tariffs in accordance with the Gas Target Model and the European Framework Guidelines on gas transmission tariffs. This task has been included in the SGRI work plan 2011-14.

As regard allocation mechanisms and procedures to develop new capacity, it is remarkable the Open Seasons (OS) and Open Subscription Periods (OSP) for the international connection between Spain and France and the mechanisms to allocate interconnection capacity between Spain and Portugal (auctions), regulated by the recently approved Circular 2/2012, dated 8th June 2012.

1. France-Spain interconnection (OSP and OS)

In order to manage congestion at the international interconnection with France, it is worth mentioning the work carried out in the framework of the South Gas Regional Initiative that has led to the implementation of a system of Open Subscription Periods (OSP) and Open Season procedures (OS) at the FR-SP border.

In particular, capacity in the IPs (interconnection points) with France is still deemed very scarce and has been identified as one of the main obstacles to create a Gas Regional Market in the South Region, as an interim step through the single Internal Energy Market in Europe. The existence of sufficient accessible interconnection capacity between France and Spain is a prerequisite to foster competition between gas companies, increase market liquidity and enhance diversification and security of supply.

a) Open Subscription Period (OSP)

The OSP procedure is the allocation process, among requesting shippers, of the available existing capacity between France and Spain. The OSP establishes the process to allocate, in a coordinated way, exit capacity from one country and entry capacity into the adjacent network, in both flow directions.

The capacity offered under the OSPs is split, in order to promote competition in the supply business and enhance liquidity of the Spanish and French markets:

- Long-Term Capacity: 80% of the firm capacity offered, reserved for multiannual and multi-seasonal requests until 2013.
- Short-Term Capacity: 20% of the firm capacity, reserved for requests of one year or less.
The first allocation through OSP was in 2008, where all the capacity offered both in the long term (from April 2009 to March 2013) and the short term, and on the short term (from April 2009 to March 2010) was allocated.

In 2012, as it happened in the previous years, a new OSP was launched for allocating yearly capacity, in this last case for capacity from April 2013 to March 2014. The entire capacity offered in both directions was not allocated. The capacity was fully allocated in the France-Spain direction and capacity was not requested in the Spain-France direction.

This process of short term capacity allocation will be reproduced annually until 2013.

b) Open Season (OS) procedure

The OS procedure emerges from the need to increase interconnection capacity between France and Spain. The aim of this procedure is to assess the interconnection capacity needs of the stakeholders between the two countries and inside France and, on a second phase, to organize a request and allocation procedure for these capacities in order to develop the new infrastructure needed.

French and Spanish TSOs and NRAs started working in close cooperation in 2008, with the support of Ministries from both countries, in order to put in place such a coordinated procedure aiming at developing new capacities in two different axis:

- Western axis: new investments in existing interconnections (Larrau, Irún-Biriatou, and TIGF-GRTgaz interface) to be available from 2013.
- Eastern axis: setting up a new interconnection point at Figueras/Perthus, creating a new corridor (Midcat) for transmission of gas from South to North and from North to South, to be available from 2015.

In 2009 was launched the binding phase of the 2013 Open Season and the non-binding phase of the 2015 Open Season. The process ended successfully with the positive French TSOs’ decision of investing in the infrastructures associated to 2013 capacities. As a result of this process, capacity will be increased up to 5,5 bcm/year at Larrau interconnection as of March 2013.

In 2010 was launched the binding phase of the 2015 Open Season for the allocation of 2015 capacities. The second and final Open Season 2015 procedure ended in July of 2010.

As a result, the capacity at Irun/Biriatou interconnection will increase in 2 bcm/year in Spain-France direction, reaching 7,5 bcm/year as of 2015. This will represent 15% of the natural gas demand in France and 18% of the demand for gas in Spain in 2009.
The capacity requested was not sufficient to validate the development of the Midcat project. Finally, no capacity has been allocated in the France-Spain direction.

A chart with the current gas interconnection capacity between Spain and France is available in section 4.3.2. The chart shows the planned development of new capacity until 2015 once the OS process is completed and the capacity that had been reached if the development of the Midcat interconnection had been validated.

2. Spain - Portugal interconnection

Portugal has a transit contract throughout Spain (from Morocco to Portugal) concluded pursuant to Article 3(1) of Directive 91/296/EEC. This contract represents around 70% of the interconnection capacity from Spain to Portugal.

During 2011, it has been released and formalized cooperation between gas transporters provided in Regulation 715/2009 for the harmonization of the regulatory framework in the South Region: Spain, France and Portugal.

One of the objectives for 2012 is the development and implementation of mechanisms of hiring CAM in connection with Portugal and CMP in connection with France as set out in the plan of the South Gas Regional Initiative (SGRI) 2011-2014.

The SGRI group has agreed capacity allocation mechanism in connection between Spain and Portugal will be an auction based on the draft of the European Network Code. It has been designed by interconnected transporters (ENAGAS and REN) in cooperation with National Regulators (CNE and ERSE) and active participation of marketers. The methodology for capacity allocation between Spain and Portugal has been regulated by the Circular 2/2012, dated on 8th June 2012 of CNE.

The first yearly auction between Spain and Portugal took place in July 2012. The lack of capacity requests from registered participants resulted in the fact that no auction took place and no capacity was allocated in neither both directions. Therefore, the yearly capacity, which had not been allocated in July, was sold in the monthly product auction in September 2012.

The second yearly auction is going to take place in early summer 2013 for allocating capacity in the virtual point from October 2013 –September 2014. The tentative calendar is proposed without using a booking platform: the process duration is longer; it will begin in June 3rd and it will finish by 25th July.
Cooperation (Article 41(1)(c))

The Royal Decree-Law 13/2012, of March 30th, establishes, as a general objective of CNE, in cooperation with ACER, NRAs and European Commission, the promotion of the creation of a competitive, secure and sustainable internal energy market as well as the effective opening for all customers and suppliers in the Community, and ensuring appropriate conditions for the effective and reliable operation of gas networks, taking into account long-term objectives.

By the end of 2005, the European regulators group established its road map for the achievement of the European single market in gas, which gave rise to the creation of regional gas initiatives. The South Gas Regional Initiative, which is composed of Portuguese, French and Spanish gas systems and leaded and boosted by CNE, has made significant progress.

The regulators group of this initiative is formed by the French regulator (CRE), the Portuguese regulator (ERSE) and the Spanish regulator (CNE). In this initiative transporters, suppliers and other agents from the three countries work together to achieve the objective of an internal market in gas natural, through regional integration of markets.

The main issues of the SGRI are: increase interconnection capacity with the rest of Europe, improve interoperability between systems, increase transparency, implementation of the Directive and development of gas hubs.

In parallel to the South Gas RI, another remarkable cooperation initiative is the creation of an Iberian gas hub. CNE has decided to set up a working group of natural gas sector participants with the aim of advancing the establishment of an Iberian organized market. The areas to be considered include revamping existing legislation, particularly the part dealing with pipeline access contracts, an analysis of modifications that may have to be made to the logistics model now in place, compiling a report on the current operation of European gas markets and a study of integration and development models for an Iberian gas hub.

Monitoring investment plans and assessment of consistency with Communitywide network development plan Article 41(1)(g)

The Royal Decree-Law 13/2012, of March 30th, attributes CNE new duties and powers, among other, monitoring investment plans of the transmission system operators, particularly regarding the consistency with the Community-wide network development plan investment plans of the transmission system operators as regards their consistency with the Community-wide network development, such assessment may include recommendations to amend those investment plans.
In 2012, in base of the current duties, CNE already participated in the energy planning procedure of network investment by means of the Gas Planning Procedure which is responsibility of the Government and counts with the participation of the Autonomous Communities, the Technical System Operator, transmission and distribution system operators and other actors, as well as CNE.

4.1.5 Compliance

**o Compliance of regulatory authorities with binding decisions of the Agency and the Commission (Article 41(1)(d)) and with the Guidelines (Article 43)**

As already mention, the Royal Decree-Law 13/2012 obliges CNE to comply with and put into practice those pertinent and binding decisions issued by ACER and the EC. In this regard, CNE may request the opinion of the Agency on the compliance of a decision taken by a regulatory authority with the Guidelines referred to in the Directives 2009/72 and 2009/73 and Regulation 715/2009.

Throughout 2012, there weren´t any binding decision issued by the CNE or ACER towards CNE.

**o Compliance of transmission and distribution companies, system owners and natural gas undertakings with relevant Community legislation, including cross-border issues (Article 41(1)(b), Article 41(1)(r), Article 41 (3) and Article 41(5)) + imposing penalties (Article 41(4)(d))**

CNE shall ensure compliance of transmission and distribution system operators and, where relevant, system owners, as well as of any gas undertakings, with their obligations under Royal Decree-Law 13/2012, Spanish Hydrocarbons Act or any other legal provision, including as regards cross-border issues.

On the other hand, CNE will draft an annual report on its activity and the fulfilment of its duties. The content of this report will be included in the annual sectorial report to be drafted by CNE. In this regard, CNE shall propose any regulatory improvement to the Ministry of Industry, Energy and Trade.

**o Power to carry out investigations and impose measures to promote competition etc. (art. 41s(4)(b) + 41(5)(a)**

Concerning the NRA’s powers to carry out investigations and impose measures to promote competition, the abovementioned Royal Decree-Law 13/2012 entitled CNE to
monitor prices and supply conditions applicable to final consumers and verifies the compliance with Electric Power Act 54/1997 and Hydrocarbons Act 34/1998 (30th Function).

CNE is entitled as well to monitor the level of transparency and competitiveness, including of wholesale prices, and the level and effectiveness of market opening and competition at wholesale and retail levels (Function 31st).

Moreover, CNE collaborates with the National Competition Commission in the fulfilment of its duties.

**o Power to ask any information from gas undertakings (art.41(4)(c)**

Regarding CNE’s powers to ask any information from gas undertakings, the Hydrocarbons Act entitles CNE to gather from the agents operating in the energy markets any information it may require in the performance of its functions. To do so, CNE shall issue the so-called “Circulars” that must be published in the Spanish Official Gazette, detailing and specifying the content of the information to be requested and justifying the exact function such information is required for and how it is to be used.

In any case, according to Law 30/1992, 26th November, on the Legal System of Public Administrations and Common Administrative Procedure, CNE may also request, by a single communication, information from an agent, in order to carry out a specific investigation procedure. If the agent does not comply with this request, CNE, under Royal Decree-Law 13/2012, shall institute and solve disciplinary proceedings.

### 4.2 Promoting Competition

#### 4.2.1 Wholesale Markets

CNE prepares a monthly report on monitoring of wholesale gas market.

In Spain there is no organised gas hub at present. In order to provide a price reference for gas in Spain, CNE has developed an index for natural gas border prices, out of gas imports data which are available in the Web of the Office of Economics and Export Control (AEAT).

The following figure shows the evolution of natural gas prices at the border according to this index, from January 2002 to December 2012, including LNG and natural gas introduced to Spain through pipelines from Maghreb and France.
As shown in the figure above, prices reached their peak values in 2008, when prices rose sharply up to 29.37 €/MWh in December 2008. In the year 2012, natural gas border price has remained in the band of 26-28 €/MWh. The prices from July 2009 to December 2012 have rise up a 93% from 14.03 up to 27.10 €/MWh.

The table below shows the monthly evolution of these prices in 2012 (in €/MWh):

<table>
<thead>
<tr>
<th>(€/MWh)</th>
<th>Natural gas (pipeline)</th>
<th>LNG</th>
<th>Average import price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 2012</td>
<td>27.68</td>
<td>26.38</td>
<td>26.86</td>
</tr>
<tr>
<td>Feb 2012</td>
<td>28.10</td>
<td>25.35</td>
<td>26.41</td>
</tr>
<tr>
<td>Mar 2012</td>
<td>27.81</td>
<td>26.60</td>
<td>27.12</td>
</tr>
<tr>
<td>Apr 2012</td>
<td>27.89</td>
<td>25.55</td>
<td>26.65</td>
</tr>
<tr>
<td>May 2012</td>
<td>28.51</td>
<td>26.77</td>
<td>27.37</td>
</tr>
<tr>
<td>Jun 2012</td>
<td>28.86</td>
<td>26.58</td>
<td>27.79</td>
</tr>
<tr>
<td>Jul 2012</td>
<td>29.11</td>
<td>28.17</td>
<td>28.59</td>
</tr>
<tr>
<td>Aug 2012</td>
<td>29.88</td>
<td>25.97</td>
<td>27.34</td>
</tr>
<tr>
<td>Sep 2012</td>
<td>29.62</td>
<td>27.06</td>
<td>27.69</td>
</tr>
<tr>
<td>Oct 2012</td>
<td>29.44</td>
<td>26.27</td>
<td>27.14</td>
</tr>
<tr>
<td>Nov 2012</td>
<td>28.62</td>
<td>23.11</td>
<td>25.73</td>
</tr>
<tr>
<td>Dec 2012</td>
<td>28.29</td>
<td>26.12</td>
<td>27.10</td>
</tr>
</tbody>
</table>

Source: AEAT and CNE
a) Spanish OTC gas market (MS-ATR Platform)

Most of gas traded in the Spanish market is negotiated in bilateral OTC transactions, over an electronic trading platform developed by ENAGAS, called “MS-ATR”. There are nearly 41 active traders in this platform.

At the moment, gas is actively traded in Spain across eight balancing points: the six LNG terminals; the virtual balancing point (so called AOC) and the virtual storage point comprising the four Spanish underground storage sites in operation (Serrablo, Gaviota, Marismas and Yela), with two of them that have been put into service in 2012 (Marismas and Yela).

Figure 17. Balancing and trading points.
Source: CNE.
Liquidity lies almost completely on the LNG terminals, which accounted for 78.2% of all OTC trade in 2012. Barcelona LNG terminal was the main trading point with 24.7% of gas trade. The AOC, which could look like an attractive virtual trading point, only drew 21.2% of OTC trade.

<table>
<thead>
<tr>
<th>Balancing point</th>
<th>Traded gas 2012 (TWh)</th>
<th>Production (TWh)</th>
<th>Churn rate</th>
<th>Number of active traders</th>
<th>Market share of 3 main traders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barcelona LNG Terminal</td>
<td>112.352</td>
<td>57.408</td>
<td>2.0</td>
<td>20</td>
<td>59%</td>
</tr>
<tr>
<td>Huelva LNG Terminal</td>
<td>90.262</td>
<td>40.059</td>
<td>2.3</td>
<td>13</td>
<td>59%</td>
</tr>
<tr>
<td>Bilbao LNG Terminal</td>
<td>61.068</td>
<td>40.374</td>
<td>1.5</td>
<td>8</td>
<td>66%</td>
</tr>
<tr>
<td>Cartagena LNG Terminal</td>
<td>43.699</td>
<td>28.813</td>
<td>1.5</td>
<td>14</td>
<td>87%</td>
</tr>
<tr>
<td>Mugardos LNG Terminal</td>
<td>20.706</td>
<td>17.987</td>
<td>1.2</td>
<td>10</td>
<td>81%</td>
</tr>
<tr>
<td>Sagunto LNG Terminal</td>
<td>26.912</td>
<td>31.918</td>
<td>0.8</td>
<td>8</td>
<td>91%</td>
</tr>
<tr>
<td><strong>Total LNG</strong></td>
<td><strong>354.999</strong></td>
<td><strong>216.559</strong></td>
<td><strong>1.6</strong></td>
<td><strong>26</strong></td>
<td><strong>51%</strong></td>
</tr>
<tr>
<td>Underground storage</td>
<td>2.776</td>
<td></td>
<td></td>
<td>15</td>
<td>69%</td>
</tr>
<tr>
<td>Transmission balancing point</td>
<td>96.217</td>
<td>145.138</td>
<td>0.7</td>
<td>35</td>
<td>37%</td>
</tr>
<tr>
<td><strong>Total Spain</strong></td>
<td><strong>453.992</strong></td>
<td><strong>361.697</strong></td>
<td><strong>1.5</strong></td>
<td><strong>42</strong></td>
<td><strong>47%</strong></td>
</tr>
</tbody>
</table>

*Figure 18. Spanish OTC gas market vs. consumption 2012 (GWh/month)  
Source: ENAGAS and CNE*
Transactions in the Spanish OTC market in 2012 represented globally 1.25 times natural gas demand.

Next figures show the monthly evolution of gas traded and of the number of transactions – almost 50,000 – registered in the Spanish OTC market in 2012.

Figure 19. Gas traded in the OTC market during 2012
Source: ENAGAS

Figure 20. Gas transactions in the OTC market in 2012 (nº Transactions/month)
Source: ENAGAS
The figure below shows the market sharing-out in the OTC gas market for 2012 in terms of purchased energy. The highest shares belong to Unión Fenosa with 18.8% and Gas Natural Comercializadora with 15.3%.

<table>
<thead>
<tr>
<th>Company</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNIÓN FENOSA</td>
<td>18.8%</td>
</tr>
<tr>
<td>GAS NATURAL COMERCIALIZADORA</td>
<td>15.3%</td>
</tr>
<tr>
<td>ENDESA ENERGÍA</td>
<td>12.9%</td>
</tr>
<tr>
<td>IBERDROLA GENERACIÓN, S.A.U.</td>
<td>10.9%</td>
</tr>
<tr>
<td>CEPSA</td>
<td>9.5%</td>
</tr>
<tr>
<td>NATURGAS</td>
<td>9.3%</td>
</tr>
<tr>
<td>NATURGAS SUR SDG, S.A.</td>
<td>1.0%</td>
</tr>
<tr>
<td>SDNATRACH</td>
<td>1.2%</td>
</tr>
<tr>
<td>GAZ DE FRANCE</td>
<td>1.7%</td>
</tr>
<tr>
<td>BBE</td>
<td>1.9%</td>
</tr>
<tr>
<td>SHELL</td>
<td>2.8%</td>
</tr>
<tr>
<td>EON</td>
<td>3.3%</td>
</tr>
<tr>
<td>BP</td>
<td>4.6%</td>
</tr>
<tr>
<td>BP</td>
<td>4.6%</td>
</tr>
<tr>
<td>CENTRICA</td>
<td>1.4%</td>
</tr>
<tr>
<td>GAS NATURAL COMERCIALIZADORA</td>
<td>15.3%</td>
</tr>
<tr>
<td>ENDESA ENERGÍA</td>
<td>12.9%</td>
</tr>
<tr>
<td>OTHERS</td>
<td>5.5%</td>
</tr>
</tbody>
</table>

**Figure 21. Market share (purchases) in the OTC market in 2012**

Source: ENAGAS and CNE

Given that the OTC platform MS-ATR allows free trading through direct gas exchanges, without a price, there is no public information available on OTC prices.

**b) Roadmap to develop a gas exchange in Spain**

In April 2010, CNE published a road map to develop a gas exchange in Spain. The objective is to accelerate the creation of a gas hub in the Spanish Gas System in order to promote competitiveness, transparency, and reducing the lack of transparency of the current OTC market.
The analysis concluded that the current conditions experienced in the Spanish Market are enough for the development of the hub, with similar services to the ones offered in other gas hubs in Europe. However the wholesale market is facing problems regarding lack of liquidity and transparency in price issues.

The creation of a gas hub in Spain requires the support of the regulatory authorities, by creating, under the current regulation, an exchange gas market, with free access to traders and consumers, and the designation of an independent market operator.

It is also necessary the introduction of some regulatory measures in order to reinforce trust and increase market liquidity.

The development of the organized gas market would help to increase the liquidity and transparency of the OTC market (they both would co-exist).

In 2012, the creation of an Iberian gas hub has received a new impetus. CNE has created a new working group, working in parallel with the South Gas Regional Initiative that brings together all the stakeholders in order to analyse and discuss the regulatory measures needed to remove all the regulatory barriers to develop this hub. The final regulatory proposals of this group will be submitted to the Ministry of Industry, previous consultation to the Hydrocarbons Advisory Board.

c) Auctions to buy operational gas for TSOs

The Ministerial Order IET/3587/2011, of 30 December, which lays down the transit charges associated with access by third parties to gas facilities and remuneration of the gas sector’s regulated activities, established that Transmission and LNG system operators must purchase every year the gas they need for their own consumption (operating gas) and for the minimum filling level of their assets (minimum filling level gas) by means of an annual auction procedure covering the acquisition of the gas needs from the 1 July of the current year to the 30 June of the following one. The general rules of the auction procedure are established by Resolution of 19 May 2008, by the General Secretariat of Energy, which lays down the auction procedure for the acquisition of natural gas for use in operation and the minimum level of the transmission, regasification and underground storage facilities. The specific rules of the yearly auction are established every year in a Resolution of the General Directorate of Energy Policy and Mining of the Ministry of Industry, Tourism and Trade. CNE is the supervisory body for these auctions and the Spanish power exchange (Operador del Mercado Ibérico de Energía, Polo Español, S.A. - OMEL)\textsuperscript{35} is the institution responsible for organising them.

\textsuperscript{35} Through its subsidiary OMEL Diversificación S.A.U. from 2009.
The auction is based on a mechanism of multi-round descending clock price. The following table summarises the results of the auctions held in 2009, 2010, 2011 and 2012. The auction corresponding to the period 1 July 2013 – 30 June 2014 was held on 28 May 2013.

<table>
<thead>
<tr>
<th>Type</th>
<th>Date</th>
<th>28 May 2009</th>
<th>25 May 2010</th>
<th>24 May 2011</th>
<th>29 May 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>GWh operating gas</td>
<td></td>
<td>1,259.2</td>
<td>1,518.6</td>
<td>1,504.9</td>
<td>1,961.2</td>
</tr>
<tr>
<td>GWH min. filling level</td>
<td></td>
<td>356.8</td>
<td>416.6</td>
<td>89.4</td>
<td>59.9</td>
</tr>
<tr>
<td>GWh total</td>
<td></td>
<td>1,616.0</td>
<td>1,935.2</td>
<td>1,594.2</td>
<td>2,021.14</td>
</tr>
<tr>
<td>Supply period</td>
<td></td>
<td>1 July 2009 - 30 June 2010</td>
<td>1 July 2010 - 30 June 2011</td>
<td>1 July 2011 - 30 June 2012</td>
<td>1 July 2012 - 30 June 2013</td>
</tr>
<tr>
<td>Auction price</td>
<td></td>
<td>14.65 €/MWh</td>
<td>19.37 €/MWh</td>
<td>26.16 €/MWh</td>
<td>32.31 €/MWh</td>
</tr>
</tbody>
</table>

Table 26. Auctions for operating and minimum filling level gas: results of the auctions held in 2009-2012

Source: auction administrator and CNE

**d) Auctions for the acquisition of the natural gas whose price will be used as a reference for establishing the last resort tariff (LRT)**

The Ministerial Order ITC/863/2009, approved on 2 April 2009, regulates the auction procedure for the acquisition of the natural gas whose price will be used as a reference for establishing the last resort tariff (LRT).

Two auctions are to be celebrated each year for the “base load gas” product and one for the “winter gas” product.

The products subject to auction during year 2012 were: (i) the base load gas at a pre-established monthly amount for the period 1 July 2012 - 31 December 2012 and for the period 1 January 2013 – 30 June 2013; and (ii) the winter gas for pre-established monthly amounts for the period November 2012 - March 2013.

A multiple-round descending-clock price mechanism was used for the two auctions celebrated during year 2012, and their results were as follows:

---

36 In the auctions of years 2011 and 2012 no minimum filling level gas was actually auctioned, being the 100% corresponding to operating gas. The operating gas correspond to “full requirement”, therefore the final amount supplied can slightly deviate from the indicative figure in the table.

Auction for the acquisition of natural gas for the last resort tariff

<table>
<thead>
<tr>
<th>Type</th>
<th>Multi-round descending price, electronic mechanism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>19 June 2012</td>
</tr>
<tr>
<td>Monthly base load gas (GWh)</td>
<td>1,620 GWh (270 GWh/month) for second half of year 2012</td>
</tr>
<tr>
<td></td>
<td>1,620 GWh (270 GWh/month) for first half of year 2013</td>
</tr>
<tr>
<td>Winter gas (GWh)</td>
<td>2,570 GWh (November 2012 - March 2013)</td>
</tr>
<tr>
<td>Supply period</td>
<td>1 July 2012 - 30 June 2013</td>
</tr>
<tr>
<td>Auction price for base load gas</td>
<td>33.50 €/MWh (2012)</td>
</tr>
<tr>
<td>Auction price for winter gas</td>
<td>30.48 €/MWh</td>
</tr>
<tr>
<td></td>
<td>30.75 €/MWh</td>
</tr>
</tbody>
</table>

Table 27. Auctions for natural gas for last resort supply: results of the auctions held in 2012

Source: Auction administrator and CNE

In 2013, the first auction was celebrated on 18 June 2013. The products subject to this auction are the base load gas at a pre-established monthly amount (250 GWh/month) for the period 1 July 2013 - 31 December 2013 and the winter gas for pre-established monthly amounts for the period November 2013 - March 2014 (2,370 GWh).

e) Auctions to buy cushion gas for the new underground storage facilities

On 6 June 2012 the first auction for the procurement of cushion gas for the new underground storage facilities took place. The main regulation related to that auction is:

- Resolution of the State Energy Secretariat (SEE) of 17 April 2012, establishing the auction procedure. The maximum amount to be auctioned was fixed in 9,846 GWh;
- Resolution of the General Directorate of Energy Policy and Mining (DGPEM) of 11 May 2012, establishing the operational rules for the development of the auction for the purchase under year 2012 of the natural gas needed to fill the minimum level of the basic underground storages “Yela” and “Castor”;
- DGPEM Resolution of 30 May 2012, updating some auction parameters. The total amount finally auctioned off was 2,724 GWh. However, the total matched amount was 1,513 GWh, allocated between the 4 winners. The deliveries were arranged in two periods of 2 months: the first period from 15 June 2012 to 15 August 2012, and the second period from 16 August 2012 to 15 October 2012.

The second auction was celebrated on 14 May 2013. The maximum amount to be auctioned off is 10,042 GWh (29% for Yela and 71% for Castor). The deliveries are arranged in two periods of 2.5 months: the first period from 1 June 2013 to 15 August 2013, and the second period from 16 August 2013 to 31 October 2013. The total matched amount was 2,174 GWh, allocated between the 7 winners.

38 In the auction held on 19 June 2012, the matched quantities for each product were 85% of the auctioned amounts shown in the Table 27.
4.2.1.1 Monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition

- Article 41(1)(i), (j), (k), (l), (u) and Article 44(3)

According to Article 3 of the Hydrocarbons Act, CNE already had the duty to oversee the levels of transparency and fair competition. This mandate, that already existed, has been incorporated in a more detail wording including the level and effectiveness of market opening and competition at wholesale and retail markets, among the new powers and duties of CNE by the Royal Decree-Law 13/2012 (31st Function).

This monitoring duty includes, among other, the overseeing of the level and effectiveness of market opening and competition at wholesale and retail markets or/and the occurrence of restrictive contractual practices, including exclusivity clauses which may prevent large non-household customers from contracting simultaneously with more than one supplier or restrict their choice to do so, and, where appropriate, informing the national competition authorities of such practices.

Effectiveness of competition

CNE develops its monitoring functions of market opening and competition in wholesale and retail markets by periodic reports (monthly reports for wholesale markets and quarterly reports for retail markets). Additionally to the mentioned reports, among CNE´s monitoring functions it is important to highlight its legal duty to monitor the supplier switching and OCSUM activities in compliance with existing regulations.

Also, CNE elaborates an annual report to the Ministry of Industry, Energy and Tourism, analysing the degree of development of competition in the electricity market and hydrocarbons market including, where appropriate, proposals for regulatory reforms aimed at strengthening the degree of effective competition in the sector.

Transparency of wholesale prices

Regarding transparency, since there is no organised gas hub at present to provide a price reference for gas in Spain, CNE has developed an index for natural gas border prices, out of gas imports data which are available in the Web of the Office of Economics and Export Control (AEAT). In this sense, it is worth to mention that in April 2010, CNE published a road map to develop a gas hub in Spain.
Furthermore, in the aforementioned monthly monitoring report on wholesale market it is followed up the evolution of the prices in the international markets in order to compare with the domestic prices of gas.

In relation to record keeping, among the rights and obligations of traders, the Royal Decree-Law 13/2012 requires to keep at the disposal of national authorities, including CNE, the National Competition Authorities and the European Commission, for at least five years, the relevant data relating to all transactions in gas supply contracts and gas derivatives with wholesale customers and transmission system operators as well as storage and LNG operators.

Regarding the scope of Regulation (EU) No 1227/2011 of the European Parliament and of the Council of 25 October 2011 on Wholesale Energy Market Integrity and Transparency (REMIT), CNE participates actively in the CEER and ACER Market Integrity and Transparency (MIT) Working Groups and related Task Forces. In particular, the CMIT WG deliverable “CEER Status Review and Advice on Further Transparency Measures on the Publication of Fundamental and Transactional Data” is foreseen, with the aim to summarize good practices by National Regulatory Authorities publishing market and fundamental data, serving as a base for discussion. CNE would then describe accordingly which data publishes currently.

The enlarged supervisory competences for CNE stated in the Royal Decree-Law 13/2012 are aligned with the REMIT provisions.

By last, the Royal Decree-Law 13/2012, of March 30th, attributes CNE new duties and powers, among other, respecting contractual freedom with regard to interruptible supply contracts as well as with regard to long-term contracts provided that they are compatible with Community law and consistent with Community policies (25th Function).

In Spain the information of the duration of the individual long-term gas supply contracts is not public. However, historically most of the gas supply contracts of all Spanish marketers have been long-term contracts with producing countries. That applies for both, LNG and pipelines supply contracts.

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39 The CMIT WG has a Task Force called “Wholesale Energy Market” (WEM TF). The AMIT WG has two Task Forces called “Market Monitoring Governance” (MMG TF) and “Wholesale Market Surveillance” (WMS TF).
4.2.2 Retail prices

Market opening

Natural gas consumption in 2012 in Spain reached 362 TWh, 3.4% lower than in 2011. The number of gas customers in 2012 surpassed 7.3 millions, with 106.701 new customers.

All Spanish customers (including household) have been free to choose supplier since 1 January 2003.

Since July 2008, regulated tariffs for end-users (last resort tariff – LRT) only apply to residential consumers consuming less than 50.000 kWh/year and connected to a network at a pressure under 4 bar.

There are five suppliers designated as suppliers of last resort, which supply all consumers submitted to the LRT.

By 31 December 2012, the number of consumers supplied at a free price was 5.100.663 (69.07% of all consumers), while the number of consumers supplied at the regulated tariffs was 2.284.539 (30.93% of the consumers). Free gas consumers have increased 399.142, representing 7.8% of total gas customers. In volume, consumers supplied at regulated tariffs represent only 3.5% of the Spanish gas market.

![Figure 22. Consumers at the Last Resort Tariff vs consumers at free market price](source: CNE)
Retail market structure

The total number of gas consumers in December 2012 was 7,385,202 (+106,701 consumers with regard to December 2011), and the gas demand was 362 TWh (-3.4% compared to 2011).

The figure below shows the share of supplies in the Spanish market in 2012 by company, in terms of energy volume:

Figure 23. Share of natural gas supplies by company (in energy volume)
Source: CNE
In terms of number of customers, the sharing-out of supplies at 31 December 2012 was:

![Share per company, Number of customers (2012)](image)

**Figure 24. Share of natural gas supplies by company (in energy volume)**  
*Source: CNE*

The sharing-out of natural gas consumption by end-use sectors in 2012 was as follows:

![Figure 25. Consumption of natural gas by sectors (2012). Source: Sedigas](image)
The evolution of this segmentation over time shows a very remarkable decrease in the share of gas dedicated to electricity generation, reaching a percentage of 23% in 2012 from a 40% in year 2009. The four last years there have been a decrease in the use of gas in electricity generation due to the reduction in consumption because of the crisis and the increase of production with renewable energies and with coal.

![Figure 26. Natural gas sales in Spain (GWh).](image)

Source: Sedigas
The following table shows the sharing-out of gas consumption in the Spanish market, broken down by levels of pressure and consumption, according to the different tariff groups existing in the Spanish gas system for the characterisation of consumers:

<table>
<thead>
<tr>
<th>Consumption groups (Pressure range and annual consumption)</th>
<th>MWh</th>
<th>Number of Consumers (31 Dec 2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group 1 (Pressure &gt;60 bar)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1: Consumption &lt;= 200 GWh/year</td>
<td>1.357.061</td>
<td>24</td>
</tr>
<tr>
<td>1.2: Consumption &gt; 200 GWh/year &lt;= 1.000 GWh/year</td>
<td>18.014.122</td>
<td>31</td>
</tr>
<tr>
<td>1.3: Consumption &gt; 1.000 GWh/year</td>
<td>109.227.371</td>
<td>56</td>
</tr>
<tr>
<td><strong>TOTAL Group 1</strong></td>
<td>128.598.554</td>
<td>111</td>
</tr>
<tr>
<td><strong>Group 2 (Pressure &gt;4 bar and &lt;= 60 bar)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1: Consumption &lt;= 500.000 KWh/year</td>
<td>551.723</td>
<td>710</td>
</tr>
<tr>
<td>2.2: Consumption &gt; 500.000 KWh/year &lt;= 5 GWh/year</td>
<td>2.675.408</td>
<td>1.332</td>
</tr>
<tr>
<td>2.3: Consumption &gt; 5 GWh/year &lt;= 30 GWh/year</td>
<td>12.809.212</td>
<td>1.038</td>
</tr>
<tr>
<td>2.4: Consumption &gt; 30 GWh/year &lt;= 100 GWh/year</td>
<td>20.962.909</td>
<td>457</td>
</tr>
<tr>
<td>2.5: Consumption &gt; 100 GWh/year &lt;= 500 GWh/year</td>
<td>57.107.279</td>
<td>273</td>
</tr>
<tr>
<td>2.6: Consumption &gt; 500 GWh/year</td>
<td>41.781.974</td>
<td>38</td>
</tr>
<tr>
<td><strong>TOTAL Group 2</strong></td>
<td>135.888.505</td>
<td>3.848</td>
</tr>
<tr>
<td><strong>Group 2 BIS (Pressure &lt;= 4 bar)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 bis: Consumption &lt;= 500.000 KWh/year</td>
<td>157</td>
<td>2</td>
</tr>
<tr>
<td>2.2 bis: Consumption &gt; 500.000 KWh/year &lt;= 5 GWh/year</td>
<td>727.775</td>
<td>365</td>
</tr>
<tr>
<td>2.3 bis: Consumption &gt; 5 GWh/year &lt;= 30 GWh/year</td>
<td>672.496</td>
<td>85</td>
</tr>
<tr>
<td>2.4 bis: Consumption &gt; 30 GWh/year &lt;= 100 GWh/year</td>
<td>4.745</td>
<td>0</td>
</tr>
<tr>
<td>2.5 bis: Consumption &gt; 100 GWh/year &lt;= 500 GWh/year</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2.6 bis: Consumption &gt; 500 GWh/year</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL Group 2 BIS</strong></td>
<td>1.405.173</td>
<td>452</td>
</tr>
<tr>
<td><strong>Group 3 (Pressure &lt;= 4 bar)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1: Consumption &lt;= 5,000 kWh/year</td>
<td>9.311.160</td>
<td>3.870.314</td>
</tr>
<tr>
<td>3.2: Consumption &gt; 5,000 kWh/year &lt;= 50,000 kWh/year</td>
<td>31.627.707</td>
<td>3.441.228</td>
</tr>
<tr>
<td>3.3: Consumption &gt; 50,000 kWh/year &lt;= 100,000 kWh/year</td>
<td>1.430.361</td>
<td>22.209</td>
</tr>
<tr>
<td>3.4: Consumption &gt; 100,000 kWh/year hasta 1 GWh.</td>
<td>15.019.597</td>
<td>43.734</td>
</tr>
<tr>
<td>3.5: Consumption &gt; 8 GWh/year.(night consumption)</td>
<td>7.778.377</td>
<td>2.693</td>
</tr>
<tr>
<td><strong>TOTAL Group 3</strong></td>
<td>65.167.202</td>
<td>7.380.176</td>
</tr>
<tr>
<td><strong>Group 4 (Interrumpible ) (Pressure &gt; 60 bar)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1:Consumption &lt;= 200 GWh/year</td>
<td>594</td>
<td>1</td>
</tr>
<tr>
<td>4.2:Consumption &lt;= 200 GWh/year &lt;= 1000 GWh/year</td>
<td>745</td>
<td>0</td>
</tr>
<tr>
<td>4.3:Consumption &gt; 1000 GWh/year</td>
<td>6.867.961</td>
<td>1</td>
</tr>
<tr>
<td><strong>(Pressure &gt;4 bar and &lt;= 60 bar)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.4:Consumption &lt;= 30 GWh/year</td>
<td>3.877</td>
<td>1</td>
</tr>
<tr>
<td>4.5:Consumption &gt; 30 GWh/year &lt;= 100 GWh/year</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4.6:Consumption &gt; 100 GWh/year &lt;= 500 GWh/year</td>
<td>2.840.021</td>
<td>0</td>
</tr>
<tr>
<td>4.7:Consumption &gt; 500 GWh/year</td>
<td>3.331.915</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL Group 4</strong></td>
<td>13.045.113</td>
<td>3</td>
</tr>
<tr>
<td><strong>Non-energetic use (raw material)</strong></td>
<td>4.582.295</td>
<td>2</td>
</tr>
<tr>
<td><strong>LNG satellite plant for a single consumer</strong></td>
<td>13.010.565</td>
<td>608</td>
</tr>
<tr>
<td><strong>TOTAL GENERAL</strong></td>
<td>361.697.407</td>
<td>7.385.202</td>
</tr>
</tbody>
</table>

Table 28. Natural gas consumption and number of consumers in 2012

Source: CNE
**Evolution of gas market share**

At the end of 2012 there were 74 companies registered as retailers in the Spanish gas market. The share of the retailers in the liberalised market could be seen in the next figure:

![Graph of share of retailers in the Spanish liberalised market](attachment:image)

*Figure 27. Spanish retail gas market. Sharing-out in terms of energy
Source: CNE*

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

As it has been described above, CNE had a mandate of overseeing the levels of transparency and fair competition. This mandate, that already existed, has been incorporated in a more detail as a new duty for CNE by the Royal Decree-Law 13/2012 (31st Function) to monitor the level of transparency and competence as well as the level and effectiveness of market opening and competence at wholesale and retail markets.

The Royal Decree-Law 13/2012, of March 30th, attributes CNE new duties and powers, among other, to enforce respect to contractual freedom with regard to interruptible supply contracts as well as with regard to long-term contracts provided that they are compatible with Community law and consistent with Community policies (25th function).
**Transparency of retail prices**

At retail level, CNE monitors retail prices through the commercial offers that are published in CNE’s price comparison tool. There is an obligation for the suppliers to communicate to CNE all public offers of gas or electricity, including any change in tariffs to the price comparison tool. The suppliers are responsible for the data presented, as they have to send updated information. CNE can impose sanctions to the companies in case of non-communication of offers. The offers include all main characteristics: green offers, offers including additional services (like heating maintenance), offers that are available to contract by internet, offers that are available to contract by phone, offers with electronic bill.

Also, by the “Circular” 5/2008 of CNE, suppliers are officially requested to submit information about supply contracts (consumption and prices) broken down by geographical areas and levels of pressure and consumption.

CNE publishes a quarterly monitoring report of retail gas market. This report assesses, among other, the evolution of consumption, number of clients and market shares of trading companies. Also, CNE publishes an annual report of retail gas market in which is analysed, among other, the evolution of retail markets prices and a comparison between retail market prices in Spain and UE-27 average prices.

The Royal Decree-Law 13/2012, of March 30th, attributes CNE new duties and powers, among other, to enforce respect to contractual freedom with regard to interruptible supply contracts as well as with regard to long-term contracts provided that they are compatible with Community law and consistent with Community policies (25th function).

**Level and effectiveness of market opening and competition**

The evolution of gas market shares in the years 2000 to 2012 could be seen in the figure 27, and it could be concluded that the competition in the retail market has increased due to the apparition of different competitors and the increase of the number of clients in the market. In the beginning there was an oligopoly, with two enterprises with more than 90% of share (Gas Natural and Union Fenosa Gas) and it has evolved into a market with six enterprises with more than 5% of share and the initial oligopoly with around 41% of share.

CNE also monitors the switching processes and OCSUM activities. The “Supplier Switching Office (OCSUM)” was set up with the aim of monitoring and facilitating supplier switching procedures.

The existing regulation establishes the following deadlines to be met by distribution companies (DSOs):
- The DSO must answer the switching request (this is usually presented by the retailer in the name of the customer) within a period of 6 working days for customers connected up to 16 bars networks. For other customers maybe longer, depending on the interaction with the System Operator.
- If the annual consumption is lower than 100,000 kWh, the switching process is activated monthly using fixed dates (1-11-21) and therefore, the period of time cannot exceed 10 days. If the annual consumption is equal or higher than 100,000 kWh and no telemetering is available, the DSO must activate the switching during the last 5 working days of the month when the real metering of the bill has already taken place. If telemetering is available, the switch shall take no longer than 6 days after the request has been validated.

However, the existing regulation does not fully establish the operational aspects and formats for the communications flows that should take place between retailers and DSOs.

The main switching procedure regulation for gas is gathered in Hydrocarbons Act (Law 34/1998) and in Royal Decree 1434/2002. Royal Decree 1434/2002 is modified successively by Royal Decree 942/2005, Royal Decree 1011/2009 and also by Royal Decree 104/2010. To date, the communication system mostly results from agreements between retailers and DSOs, reached within the context of the working groups facilitated by OCSUM.

Recently, Royal Decree-Law 13/2012, of March 30th, introduced a general time frame of three weeks for the switching process in gas. According to this new piece of legislation, not only DSOs, but also suppliers, will have to comply with legal deadlines in relation with the switching process, to be established through future specific regulations. Additionally, the same Decree establishes that consumers will have to receive a final closure account following any change of gas supplier no later than six weeks after the switching has taken place.

Regarding the switching rate, and other related statistics, CNE monitors through two channels: (1) a quarterly report elaborated by the switching office (OCSUM) and (2) the information sent directly from distribution companies, on a monthly basis, under CNE’s Circular 5/2008. OCSUM’s reports are not public. The Office only has the legal obligation to communicate switching and other related data to CNE, to the Central Government and to the Autonomous Communities Governments.

As shown in the table below, the evolution of the switching rate during the last four years has followed an increasing trend, reaching 19.5% in 2011 and slightly decreasing in 2012 with 19.3%. On the other hand, the number of failed switches has decreased significantly during the period (this number mainly tends to reflect errors and lack of standard formats in the communication process between retailers and DSOs).
### GAS SWITCHING DATA 2009-2012*

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic switching rate</td>
<td>5,50%</td>
<td>12,48%</td>
<td>19,56%</td>
<td>19,36%</td>
</tr>
<tr>
<td>Nº domestic customers</td>
<td>7.003.887</td>
<td>6.992.771</td>
<td>7.090.556</td>
<td>7.162.715</td>
</tr>
<tr>
<td>Total switching rate</td>
<td>5,61%</td>
<td>12,28%</td>
<td>19,54%</td>
<td>19,32%</td>
</tr>
<tr>
<td>Nº all customers</td>
<td>7.009.032</td>
<td>7.180.332</td>
<td>7.139.465</td>
<td>7.222.517</td>
</tr>
<tr>
<td>% failed switches</td>
<td>7,85%</td>
<td>9,14%</td>
<td>6,72%</td>
<td>5,49%</td>
</tr>
</tbody>
</table>

*Table 29. Gas switching data 2009-2012*

Source: OCSUM


### 4.2.2.2 Recommendations on supply prices, investigations and measures to promote effective competition

**o Duties and powers of the regulatory authority on Article 41(1)(p)**

The 30th Function of CNE (as set forth by Royal Decree-Law 13/2012) is aimed at monitoring the adequacy of prices and the terms and conditions of supply to customers in accordance to the Law. Likewise, CNE may, also, propose any measures in order to increase consumer protection (29th Function).

Furthermore, pursuant to article 3 of the Directive 2009/73, “Member States may impose on undertakings operating in the gas sector, in the general economic interest, public service obligations which may relate to security, including security of supply, regularity, quality and price of supplies and environmental protection”. For more information on public service obligations related to prices, see section 5.

**o Duties and powers of the regulatory authority on Article 41(4)(b)**

CNE has the power to carry out investigations and to impose measures to promote effective competition.

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40 The calculated switching rates reflect the number of realized switches as a percentage of customer number during the analyzed period. In accordance with CEER 2010 GGP on Retail Market Monitoring Indicators, a switch is defined as “any change of supplier resulting from the customer choice.”
The Spanish legislation includes provisions and tools to avoid market abuse. The National Competition Commission (CNC) is the body responsible for applying the Competition Act 15/2007, of 3rd July, promoting and protecting the maintenance of competition in all the production sectors and throughout the national economy. The National Competition Commission and sector regulators, such as CNE, cooperate in exercising their functions. Law 2/2011 establishes new cooperation procedures between CNC and CNE.

CNE adopts information by-laws, which will have to be published in the Spanish Official Gazette, to request from the agents that operate in the gas markets all the information needed to carry out the monitoring functions. Suppliers have to comply with some rules concerning the supply contract. The main focus in supply activity (for promoting competition) is the procedure for switching supplier (for more information see 4.2.2.1).

In 2012, two mergers and acquisitions are worth mentioning in the gas sector. CNE issued its opinion about them:

- CHRISTIAN LAY/ENDESA. In this transaction CRISTIAN LAY, S.A., acquired 47% of DISTRIBUCIÓN Y COMERCIALIZACIÓN DE GAS EXTREMADURA, S.A. (DICOGEXSA) and 40% of GAS EXTREMADURA TRANSPORTISTA, S.L. (GET), which previously belonged to ENDESA GAS S.A.U. CRISTIAN LAY had exclusive control over DICOGEXSA (94%) and GET (80%) after the operation. The relevant markets, gas transmission and distribution, are regulated, and therefore the acquisition was not relevant in terms of price and access. There was no impact either in terms of benchmark competition.

- ENAGAS/NATURGAS: ENAGAS TRANSPORTE, S.A.U., acquired 90% of NATURGAS ENERGÍA TRANSPORTE, S.A. It was considered that the transaction would not affect competition, since ENAGÁS TRANSPORTE is the appointed Transmission System Operator for the core transmission network (mostly the whole transmission network) designated by the Royal Decree Law 6/2009, and there were other significant agents regarding non-core transmission networks.

On 21st June 2012, CNE approved the Resolutions by which the lists of main and dominant operators in the energy sectors are established and made public. First, CNE declared and published the list of the five companies with major market shares (the so-called “main operators”) in the electric sector (ENDESA, S.A., IBERDROLA, S.A., GAS NATURAL SDG, S.A., HIDROELECTRICA DEL CANTABRICO, S.A and E.ONESPÁÑA, S.L.) and in the natural gas sector (GAS NATURAL SDG. S.A., ENDESA, S.A., UNION FENOSA GAS, S.A., IBERDROLA, S.A. and HIDROELECTRICA DELCANTABRICO).
There is also a list for fuels and liquefied gas\textsuperscript{41}.

According to article 34 of Royal Decree-Law 6/2000 there is a limitation on the voting rights corresponding to shares in excess of 3\% held by the same person in more than one company that ranks among the biggest five (in terms of market shares) in the sector or market in question.

Secondly, on 21\textsuperscript{st} June 2012 CNE published a list of operators with a market share of over 10\% in various energy sectors (the so called “dominant operators”) including: ENDESA, IBERDROLA, EDP/HIDROCANTABRICO, GAS NATURAL FENOSA for the electricity sector and GAS NATURAL FENOSA, ENDESA and UNION FENOSA GAS for the gas sector and REPSOL-YPF and CEPSA for liquid fuels.

It should be mentioned that in the natural gas sector dominant operators are so far not affected by the restrictions and limitations applicable within the electric sector and described in paragraph 3.2.4.

Finally, on 13\textsuperscript{th} September 2012, CNE published its fourth report analyzing the development of competition in the electric and gas markets, pursuant to the 5\textsuperscript{th} additional disposition of Law 12/2007 and 17/2007.

The large investments made in the gas sector in recent years and the decrease in demand have already created an imbalance between revenues and costs, albeit much lower than the existing imbalances in the electricity sector. The Royal Decree Law 13/2012 contains some measures in order to prevent the current development model of the gas sector from producing similar imbalances to those in the electricity sector. In this sense, it is remarkable (i) a moratorium on new regasification plants; (ii) a moratorium on administrative authorisations for new gas transport pipelines and regulator and metering stations; and (iii) modifications to the remuneration of underground storage areas.

\subsection*{4.3 Security of supply}

\textbf{Monitoring on security of supply (Article 5) (if and to the extent that the NRA is the competent authority)}

The competent authority to monitor the security of supply according with article 5 of Directive 2009/73/EC is the Ministry of Industry, Energy and Tourism.

The Ministry of Industry, Energy and Tourism has published on 31 July 2012 the 1\textsuperscript{st} report

\footnote{On June 21\textsuperscript{st} 2012, CNE Administration Board approved the list of main operators in the energy sector which was published in the Official Gazette on August 21\textsuperscript{st} 2012.}
outlining the findings resulting from the monitoring of security of supply, according with article 5 of Directive 2009/73/EC, available here:


CNE participates in planning procedure of network investment by means Gas Planning Procedure, which is responsibility of the Government and counts with the participation of the Autonomous Communities, the Technical System Operator, transmission and distribution system operators and other actors, as well as CNE.

Additionally, CNE releases each year a “framework report on coverage of demand in the electricity and gas sectors” which aims at assessing the coverage of the demand at short-medium term taking into account not only the existing infrastructures but also the infrastructures under development ones.

4.3.1 Monitoring balance of supply and demand

Evolution of gas demand

Total demand for natural gas was 362.608 GWh, 2,8% lower than 2011 mainly due to the decrease of demand for electricity generation.

The conventional demand for natural gas rise by 5.7% in 2012.

There has been a reduction of 23% in the use of gas in electricity generation mainly due to the enter into force of the Royal Decree 134/2010 which promotes the consumption of indigenous coal in the electricity production, the increase of the electricity production with renewable energies, the increase in gas prices in the European markets and the decrease of the electricity demand.
The table below shows the evolution of gas demand in the Spanish market in 2012.

<table>
<thead>
<tr>
<th></th>
<th>2011 (GWh)</th>
<th>2012 (GWh)</th>
<th>Annual variation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand of gas (except power generation)</td>
<td>263.056</td>
<td>278.008</td>
<td>5,7%</td>
</tr>
<tr>
<td>Demand of gas for power generation</td>
<td>109.920</td>
<td>84.600</td>
<td>-23,0%</td>
</tr>
<tr>
<td>Total demand in Spain</td>
<td>372.976</td>
<td>362.608</td>
<td>-2,8</td>
</tr>
</tbody>
</table>

*Table 30. Gas demand in Spain in 2012 vs 2011.*

*Source: ENAGAS*

**Procurement of gas supplies. Origin and mix of gas imports**

The domestic production of Spanish fields is marginal and reaches only 393 GWh, 0,1% of Spanish gas demand in 2012. This production comes from three gas fields that are close to depletion and are thought to be used as underground storages in the future. The rest of the gas consumed in Spain is imported.

In 2012 Spain received natural gas from a total of ten different countries.

The figure below shows the mix of gas supplies to the Spanish system in 2012:

*Figure 28. Sources of gas imported to Spain in 2012.*

*Source: CNE*
This diversification in gas supplies contributes very significantly to security of supply in the Spanish system, representing a natural risk-hedging against a possible disruption of gas from a source, due to problems in infrastructure, geopolitical issues or any other reason.

Another relevant factor that influences positively security of gas supply in Spain is the importance of LNG in gas procurement:

<table>
<thead>
<tr>
<th></th>
<th>2011 (GWh)</th>
<th>2012 (GWh)</th>
<th>Annual variation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipeline</td>
<td>129.460</td>
<td>154.859</td>
<td>19.6%</td>
</tr>
<tr>
<td>LNG</td>
<td>265.356</td>
<td>237.740</td>
<td>-10.4%</td>
</tr>
<tr>
<td>Total</td>
<td>394.816</td>
<td>392.599</td>
<td>-0.6%</td>
</tr>
</tbody>
</table>

*Source: ENAGAS*

The important increase in the imports through pipeline is due to the entry into operation in 2011 of the new international interconnection which joins Spain with Algeria, MEDGAZ.

Another relevant factor that influences positively security of gas supply in Spain is the importance of LNG in gas procurement:

<table>
<thead>
<tr>
<th></th>
<th>2012 (GWh)</th>
<th>Imported gas (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipeline</td>
<td>154.859</td>
<td>39.4%</td>
</tr>
<tr>
<td>LNG</td>
<td>237.740</td>
<td>60.6%</td>
</tr>
<tr>
<td>Total</td>
<td>392.599</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Table 32. Gas imports in Spain 2012.*  
*Source: ENAGAS*

LNG high presence provides the Spanish system with a high level of flexibility, favouring the access to new upstream gas sources and enabling gas suppliers to benefit from low-price situations by arbitrating and interacting with other markets. Moreover, the geographic situation of Spain, with access to both Atlantic and Mediterranean basins, enlarges the scope of available LNG sources, allowing gas suppliers to import gas from virtually any LNG producing country. Finally, LNG also serves as a competition driver, enabling newcomers to access the wholesale market and introduce gas in the Spanish network via spot contracts. The high share of LNG in gas imports is a consequence of the remarkable development of LNG import capacity in Spain, as explained below.
4.3.2 Expected future demand and available supplies as well as envisaged additional capacity

It is expected a stabilization of the gas demand with regard to the current value, with a slight increase of conventional demand and a decline in the demand for electricity generation, largely because of increases in renewable sources, mainly wind power. Nevertheless, regarding demand for power generation, it is remarkable that is difficult to forecast, as it can be affected by several annual circumstances: coal versus gas prices, generation with hydro power (depending on the level of reserves of water for hydroelectric power) and the amount of electricity produced by the rest of the renewable sources.

CNE’s demand forecast for the period 2013-2016 in Spain is detailed in the following table:

<table>
<thead>
<tr>
<th>Gas Demand (TWh)</th>
<th>2012 (real)</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas demand (except power generation)</td>
<td>278</td>
<td>280</td>
<td>293</td>
<td>299</td>
<td>304</td>
</tr>
<tr>
<td>Gas demand for power generation</td>
<td>85</td>
<td>73</td>
<td>71</td>
<td>95</td>
<td>121</td>
</tr>
<tr>
<td>Total gas demand in Spain</td>
<td>363</td>
<td>353</td>
<td>364</td>
<td>394</td>
<td>425</td>
</tr>
</tbody>
</table>

Table 33. Forecast of annual gas demand 2013-2016.
Source: CNE. Efficiency Scenario

Import capacity

Six LNG import terminals are operational in the Spanish gas system. A new LNG terminal in Gijón (Asturias) but it will not come into operation due to the stagnation of demand and until an increase of demand justifies it.

Spain has international gas pipeline connections with Morocco, Portugal and France, and a direct connection with Algeria (Medgaz).

While LNG terminals represent around 61 bcm/year of entry capacity to the transmission network, the connection from Algeria trough Morocco represents 12 bcm/year (8 bcm/year to Spain and 4 bcm/year to Portugal) and the connection with France at Larrau, 3 bcm/year.

The new direct connection with Algeria (Medgaz pipeline) added 8 bcm/year of import capacity.
a) Capacity of LNG import terminals

In Spain there are six LNG regasification plants. All of them are subject to regulated TPA, allowing the access to new capacity by the new entrants, which has favoured the development of gas competition in Spain. The capacity use rate is around 32,5% in average for these plants, varying from 20% (the minimum, at Cartagena), to 49% (maximum, at Bilbao).

![Figure 29. Use rate of LNG terminals in 2012](Source: ENAGAS)

The following table shows the LNG storage and send-out capacity of each one of the six terminals:

<table>
<thead>
<tr>
<th>LNG Terminal</th>
<th>LNG storage capacity (m³)</th>
<th>Send-out capacity (m³(n)/h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barcelona</td>
<td>840.000</td>
<td>1.950.000</td>
</tr>
<tr>
<td>Huelva</td>
<td>619.000</td>
<td>1.350.000</td>
</tr>
<tr>
<td>Cartagena</td>
<td>587.000</td>
<td>1.350.000</td>
</tr>
<tr>
<td>Bilbao</td>
<td>300.000</td>
<td>800.000</td>
</tr>
<tr>
<td>Sagunto</td>
<td>600.000</td>
<td>1.000.000</td>
</tr>
<tr>
<td>Mugardos</td>
<td>300.000</td>
<td>413.000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>3.246.000</strong></td>
<td><strong>6.863.000</strong></td>
</tr>
</tbody>
</table>

*Table 34. Capacity of LNG terminals at Dec, 31 2012. Source: ENAGAS*
b) Capacity of international pipeline interconnections

Spain has several international gas pipeline connections to other countries: to Algeria through Morocco (Tarifa), to Portugal through Tuy and Campo Maior (Badajoz), and to France through Larrau and Irún.

The new interconnection with Algeria, MEDGAZ, is operational since April of 2011. MEDGAZ is a strategic project for Algeria and Spain. It allows natural gas to be supplied directly from Algeria, without requiring transit through third countries, and in addition it considerably enhances security of supply and diversification in the balance NG/LNG in the imports to the Iberian Peninsula. Its initial capacity is 8 bcm/year, and the pipeline will possibly be enlarged in the future in order to reach other European countries, becoming this way an entrance corridor of gas into Europe.

The current capacities of international interconnections are the following:

<table>
<thead>
<tr>
<th>Pipeline connection</th>
<th>Capacity (GWh/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larrau (ES-&gt;FR)</td>
<td>100</td>
</tr>
<tr>
<td>Larrau (FR-&gt;ES)</td>
<td>30 (Winter) / 50 (Summer)</td>
</tr>
<tr>
<td>Irún (ES-&gt;FR)</td>
<td>5 (Winter) / 9 (Summer)</td>
</tr>
<tr>
<td>Irún (FR-&gt;ES)</td>
<td>0 (Winter) / 10 (Summer)</td>
</tr>
<tr>
<td>Tarifa (MO-&gt;ES)</td>
<td>444</td>
</tr>
<tr>
<td>Almería (AL-&gt;ES)</td>
<td>266</td>
</tr>
<tr>
<td>Badajoz (ES-&gt;PT)</td>
<td>134</td>
</tr>
<tr>
<td>Badajoz (PT-&gt;ES)</td>
<td>35 (Winter) / 70 (Summer)</td>
</tr>
<tr>
<td>Tuy (ES-&gt;PT)</td>
<td>30 (Winter) / 40 (Summer)</td>
</tr>
<tr>
<td>Tuy (PT-&gt;ES)</td>
<td>25</td>
</tr>
</tbody>
</table>

*Table 35. Interconnection physical capacities at Dec, 31 2012.*  
*Source: ENAGAS*

c) Booked and available capacity

At the end of 2012 there was available capacity in all LNG terminals. Mean booked TPA capacity at LNG terminals was 43% throughout the year. Available capacity ranges from a minimum mean value of 35% in Cartagena up to 77% in Cartagena.

In the pipeline interconnections, there was available capacity in both IPs with Portugal, except exports through Badajoz. In the interconnection through Tuy all capacity was available in the direction from Portugal to Spain throughout the year, and 59% remained free in the direction from Spain to Portugal. In the interconnection through Badajoz, some
68% average of technical capacity was free for booking during 2012 from Portugal to Spain, while only 25% remained free in the opposite direction, Spain to Portugal.

The situation was different in the connections with Morocco and France. In the Maghreb pipeline, importing gas from Algeria through Morocco, the capacity was booked in 73% throughout the year. In Medgaz pipeline, capacity book was 47%. There wasn’t free capacity at the connection with France through Larrau, with 100% of mean import capacity booked during 2012. Moreover, the Irún-Biriatou connection was only 4% free for booking in the direction from France to Spain, though its capacity is much smaller.

The following table shows the situation at all these pipelines interconnections, in terms of average rates of booked and available capacity during 2012:

<table>
<thead>
<tr>
<th>Entry (or exit) point</th>
<th>Contracted capacity in 2012</th>
<th>Available capacity in 2012 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barcelona LNG terminal</td>
<td>41,0%</td>
<td>59,0%</td>
</tr>
<tr>
<td>Sagunto LNG terminal</td>
<td>43,0%</td>
<td>57,0%</td>
</tr>
<tr>
<td>Cartagena LNG terminal</td>
<td>23,0%</td>
<td>77,0%</td>
</tr>
<tr>
<td>Huelva LNG terminal</td>
<td>50,0%</td>
<td>50,0%</td>
</tr>
<tr>
<td>Mugardos LNG terminal</td>
<td>54,0%</td>
<td>46,0%</td>
</tr>
<tr>
<td>Bilbao LNG terminal</td>
<td>65,0%</td>
<td>35,0%</td>
</tr>
<tr>
<td><strong>TOTAL LNG TERMINALS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maghreb pipeline (import)</strong></td>
<td><strong>73,0%</strong></td>
<td><strong>27,0%</strong></td>
</tr>
<tr>
<td><strong>Medgaz (import)</strong></td>
<td><strong>47,0%</strong></td>
<td><strong>53,0%</strong></td>
</tr>
<tr>
<td><strong>Larrau (import F=&gt;E)</strong></td>
<td><strong>100,0%</strong></td>
<td><strong>0,0%</strong></td>
</tr>
<tr>
<td><strong>Irún-Biriatou</strong></td>
<td><strong>Import (F=&gt;E)</strong> 96,0%</td>
<td><strong>Export (E=&gt;F) 4,0%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Export (E=&gt;F)</strong> 55,0%</td>
<td><strong>45,0%</strong></td>
</tr>
<tr>
<td><strong>Tuy</strong></td>
<td><strong>Import (P=&gt;E)</strong> 0,0%</td>
<td><strong>100,0%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Export (E=&gt;P)</strong> 41,0%</td>
<td><strong>59,0%</strong></td>
</tr>
<tr>
<td><strong>Badajoz</strong></td>
<td><strong>Import (P=&gt;E)</strong> 32,0%</td>
<td><strong>68,0%</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Export (E=&gt;P)</strong> 75,0%</td>
<td><strong>25,0%</strong></td>
</tr>
</tbody>
</table>

*Table 36. Available physical average capacities in 2012. (LNG terminal and Interconnections). Source: ENAGAS*

**Gas infrastructure investments entering into operation in 2012**

Regarding regasification plants, a new plant in Gijon (El Musel) was finished by the end of the year, but his enter into operation has been delayed due to the decrease of demand in the country by the Royal Decree Law 13/2012.
In relation to gas storage, it has been significantly increased by the incorporation of new gas storage facilities of Marismas (first phase) and Yela. Marismas is an old gas field from Huelva that was incorporated on April 1st, with a capacity of 550 GWh. Yela, located in Guadalajara, was incorporated on August, with a storage capacity around 1500 GWh that will cover 90% of the gas demand in the center zone. In Castellon (Castor), another gas storage facility has been finished, but it has not been put into service due to a Resolution of the Ministry of Industry of Spain.

Finally, those pipelines have entered into operation in 2012:

- Last stretch of Tivissa-Paterna pipeline duplication.
- Stretch of Martorell-Hostalrich from Martorell-Figueras pipeline and his connection with Besos branch pipeline, which enhances the gas network in the area of Barcelona.
- Yela-Villar de Arnedo pipeline, which connects the central area of Spain, where it is the underground storage of Yela, with the Ebro valley and Basque Country area.

**Forthcoming investments for the next three years**

In Spain, gas network investments are planned by means of a Gas Planning Procedure, which is responsibility of the Government and counts with the participation of the Autonomous Communities, the Technical System Operator, transmission and distribution system operators and other actors, as well as CNE.

The document deals, inter alia, with the following areas:

- Demand forecast for natural gas over the stipulated period (ten years).
- Forecast of the high pressure natural gas transportation network development and total LNG regasification capacity required to supply gas to the gas system, under a set of optimization criteria on a nation-wide basis.
- Definition of priority gasification areas, network expansion and execution stages, with the aim of assuring uniform development in the gas system.
- Forecasts relating to gas storage facilities and LNG terminals. It assures gas system stability and regular and continuous gas supplies.
- Environmental protection criteria are also established.

The Royal Decree-Law 13/2012 revised some infrastructure projects to adjust them to the changes in the gas demand projections, which are lower than expected. In particular, projects for new regasification plants and pipelines not deemed economically profitable for the system have been cancelled, excluding international commitments and those primarily pipelines used for the local supply of gas.
a) Investment in LNG import terminals (2013-2014)

New LNG import terminal of Gijón (Asturias)

A seventh LNG terminal (currently mothballed) is already built in Gijón, located in the North coast of Spain. The capacity of the installation will be 300,000 cubic metres in two storage tanks and a docking terminal will handle LNG tankers with capacities of 250,000 cubic metres. The regasification send-out capacity of the first-phase terminal will be 800,000 cubic metres an hour. It is expected to be finished in 2013 but, as said before, it will not come into operation due to the stagnation of demand and until an increase of demand justifies it.

Other expansions of capacity for the Spanish LNG terminals are shown in the table. The table includes only those infrastructures whose construction is foreseen to be finished in the period 2013-2015.

<table>
<thead>
<tr>
<th>Transmission System Operator</th>
<th>New infrastructures</th>
<th>Current state</th>
<th>Foreseen date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENAGAS</td>
<td>Gijón (Asturias) New LNG terminal Two storage tanks; send out capacity 800,000 m³/h</td>
<td>mothballed</td>
<td>mothballed</td>
</tr>
<tr>
<td>SAGGAS</td>
<td>Sagunto LNG terminal Increase in emission capacity up to 1,200,000 Nm³/h</td>
<td>Planned⁴²</td>
<td>2014</td>
</tr>
<tr>
<td>BBG</td>
<td>Bilbao LNG terminal Increase in emission capacity up to 1,200,000 Nm³/h 3rd storage LNG tank</td>
<td>Planned</td>
<td>2015</td>
</tr>
</tbody>
</table>

Table 37. Planned LNG infrastructures for 2013-2015.
Source: ENAGAS

⁴² Subject to an increment of demand above expected.
b) Investment in Pipeline international interconnections

Spain – France interconnections

As a result of the Open Season procedures explained before:

- The capacity at Larrau interconnection will be increased up to 5.5 bcm/year as of March 2013 in both sides.
- The capacity at Irun/Biriatou interconnection will increase in 2 bcm/year in Spain-France direction, reaching 7.5 bcm/year as of 2015.

![Physical capacity (GWh/d)](image)

\(\text{Estado actual} \quad 2013 \quad \text{OS desarrollo completo}\)

<table>
<thead>
<tr>
<th>N → S</th>
<th>2007</th>
<th>2009</th>
<th>2013 OS</th>
<th>2015 OS desarrollo completo</th>
</tr>
</thead>
<tbody>
<tr>
<td>87 GWh/d</td>
<td>100 GWh/d</td>
<td>165 GWh/d</td>
<td>405 GWh/d</td>
<td></td>
</tr>
<tr>
<td>2.7 bcm/a</td>
<td>3.1 bcm/a</td>
<td>5.2 bcm/a</td>
<td>12.7 bcm/a</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S → N</th>
<th>2007</th>
<th>2009</th>
<th>2013 OS</th>
<th>2015 OS desarrollo completo</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 GWh/d</td>
<td>35 GWh/d</td>
<td>225 GWh/d</td>
<td>455 GWh/d</td>
<td></td>
</tr>
<tr>
<td>0.1 bcm/a</td>
<td>0.9 bcm/a</td>
<td>2.1 bcm/a</td>
<td>3.3 bcm/a</td>
<td></td>
</tr>
</tbody>
</table>

Figure 30. Interconnection capacity between Spain and France.
Source: ENAGAS

c) Investment in Transmission network

As it has been said above, the Royal Decree-Law 13/2012 revised some infrastructure projects to adjust them to the changes in the gas demand projections, which are lower than expected. In particular, pipelines not deemed economically profitable for the system, excluding international commitments and those primarily pipelines used for the local supply of natural gas, have been cancelled until an increase of demand.
This does not affect to interconnections capacity projects between Spain and France, detailed before.

**d) Underground storage**

In Spain, underground storage capacity is small – only 9.1% of demand in 2012 – and has historically been a scarce resource with limited withdrawal capacity. That is why the available capacity is subject to a specific allocation mechanism: a first amount of underground storage capacity is allocated to those users obliged to keep strategic and operational gas reserves proportionally to the gas sales in the previous year; the remaining capacity is allocated through an auction.

There are four underground storage facilities in Spain: Serrablo, Gaviota, Marismas and Yela, these two last entered in operation in 2012.

- The Serrablo gas field is located between in the province of Huesca, near the Pyrenees.
- Gaviota is an off-shore facility located near Bermeo (Vizcaya).
- Yela Underground Storage Facility is located at Guadalajara, in the central area of Spain, and is connected to Enagas’ basic network by three different gas pipelines.
- The other new underground storage of Marismas that entered in operation in 2012, and is located in Huelva.

It is interesting to compare this capacity with the storage potential of the other facilities that allow storing natural gas, namely, LNG tanks and the marginal storage capacity of the transmission network (linepack):

<table>
<thead>
<tr>
<th>Maximum storage capacity (GWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underground storage</td>
</tr>
<tr>
<td>Tanks in LNG terminals</td>
</tr>
<tr>
<td>Linepack</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>

*Table 38. Storage capacity in Spain: underground storages, LNG tanks and pipelines*

*Source: ENAGAS.*

---

43 The underground storage capacity will be increased up to 40.665 GWh after the filling of cushion gas of Castor and Yela.
**Investment in Underground Storage projects: Castor underground storage project**

The Castor project consists of the conversion of a depleted oil field (the Amposta field) into a underground gas storage. The Amposta field lies at a depth of 1800 meters approximately 22 km off the East coast of Spain in the Mediterranean Sea.

The project involves two offshore platforms for 13 wells and processing facilities, the drilling and completion of 13 new wells, an onshore compression and processing plant located in the municipality of Vinaroz (Castellón), and an adjoining 30” pipeline 30 km long.

The total storage capacity of Castor is 1.550 million m3 of natural gas (1.9 bcm).

The company responsible for developing the Castor Project is ESCAL UGS.

The site of Castor is expected to come into operation in the next years. The entry into operation of this project will increase underground storage capacity around 14% of demand.

**4.3.3 Measures to cover peak demand or shortfalls of suppliers**

In Spain, all natural gas undertakings should maintain a minimum level of strategic gas storage equivalent to 20 days of their final sales in the Spanish market. This is the main measure for security of supply, in order to cover hypothetical events of big shortfalls at international production or interconnections facilities.

The peak demand can be easily supplied by an increase in the production of the six regasification plants, as they have an excess of regasification capacity.
5 CONSUMER PROTECTION AND DISPUTE SETTLEMENT

5.1 Consumer protection

Royal Decree-Law 13/2012 envisaged the need for a more effective protection of consumer rights. Therefore it has set up a framework for the definition of vulnerable customers and it has also introduced new obligations on suppliers as regards customers’ rights. Finally it has granted CNE new powers to issue binding decisions in relation to electricity and gas undertakings and to decide on appropriate measures ensuring the full effectiveness of consumer protection measures. However, according Spanish legislation customer protection issues remain being a competence of the Autonomous Communities.

Royal Decree-Law 13/2012 establishes the following new measures concerning consumer’s protection:

- It empowers the Ministry to establish specific supply conditions for certain customers that should be considered “vulnerable customers” due to their economic, social or supply characteristics. Presently this provision has been only applied for electricity consumers (bono social).

- It also requests suppliers and distributors to offer customers more information and to provide a customer service (including a free call center service) in charge of handling consumer’s questions and complaints.

- It has also introduced new deadlines for supply switching procedures.

Additionally, Royal Decree-Law 13/2012 empowered CNE with new duties and functions to enforce a better customer protection.

Firstly, CNE is entitled to ensure the compliance with any prescribed regulation and procedures in relation to the switching of gas and electricity suppliers (Function 22th).

Secondly, the new legal provision has also granted CNE new powers to supervise the adequacy of prices and supply conditions to the Electricity and Hydrocarbons Acts (Function 30th).

Additionally, CNE is entitled to supervise the consumer protection measures and to state the responsibilities for deficiencies of energy supply to consumers (Function 29th), as well as submitting regulatory proposals in relation to quality of service, supply and consumer protection measures to the Ministry and the Autonomous Communities.
When enforcing the above described functions, CNE has the power to impose all reasonable measures necessary to attain the objective of ensuring a high quality of service, customer protection (especially for vulnerable customers), and the compatibility of the exchange of data processes needed to switch supplier (amongst other objectives set forth by the law).

CNE has also the power either to propose to the Ministry or to impose penalties to DSOs and suppliers for breach of consumer protection rules as well as for other breaches of regulation including the breach of CNE binding Resolutions.

**o Compliance with Annex 1 (Article 37(1)(n)) and (Article 41(1)(o))**

The Royal Decree-Law 13/2012 has set up a new time frame of three weeks for the switching process for gas and electricity, together with other measures to increase customer protection.

Concerning gas consumer’s protection, Royal Decree-Law 13/2012 established new measures in line with annex I of Directive. In this regard, consumers are entitled to:

- have a contract with their gas service provider that specifies certain detailed information and conditions that must be fair and well-known in advance;
- receive adequate notice of any intention to modify contractual conditions and be informed about their right of withdrawal when the notice is given;
- receive transparent information on applicable prices and tariffs and on standard terms and conditions, in respect of access to and use of gas services;
- receive a wide choice of payment methods, which do not unduly discriminate between customers;
- be not charged for changing supplier and have at their disposal transparent, simple and inexpensive procedures for dealing with their complaints;
- have at their disposal their consumption data properly informed of actual gas consumption and costs frequently enough to enable them to regulate their own gas consumption;
- receive a final closure account following any change of natural gas supplier no later than six weeks after the change of supplier has taken place.

Concerning electricity customers, those obligations are regulated or shall be regulated in coming Royal Decrees that develop Royal Decree-Law 13/2012 and the Electricity Act. Further measures on consumers protection are set up in article 110 bis and 110 ter of Royal Decree 1955/2000. General consumers legislation are also applicable to gas and electricity supply contracts in the free market.
Complaints

Royal Decree-Law 13/2012 has envisaged the need for a more effective protection of consumer rights. Gas and electricity suppliers are now obliged to inform their clients about their rights and procedures in case of complaints. They are also obliged to establish a free customer information service, including a free call centre for consumer complaints.

The Autonomous Communities have a general responsibility for customer complaint handling. They are also competent for the resolution of disputes concerning last resort tariffs contracts and access to distribution network tariffs, as well as for some billing issues. CNE has the power to supervise the switching processes and to declare the infringement of switching rules. It also supervises the correct application of specific measures for vulnerable customers such as the social bonus requirements ("bono social"). All other issues are dealt with by jurisdictional courts unless alternative consumer arbitration procedures are available.

On the other hand, Royal Decree-Law 13/2012 has empowered CNE with new duties and tasks such as drafting reports and handling consumer complaints albeit in coordination with other competent authorities.

As a point of single contact, CNE shall inform consumers about their rights, the regulation in force and the procedures to settle disputes, as well as reporting annually to the Ministry on complaints received and making proposals for better regulation (Function 32nd). The necessary coordination between regional bodies and national regulator in the handling of consumer complaints as mandated in the Royal Decree is still to be articulated.

Transparency and market opening

As a measure to promote market transparency, CNE launched a web price comparison tool for gas and electricity offers. The tool is available at the following website www.comparador.cne.es.

As of 31 December 2012, the comparison tool counted 434 active offers of gas, electricity or dual supply from about 26 different companies.

Ensuring access to consumption data (Article 37(1)(p)) and (Article 41(1)(q))

The Ministry of Industry, Energy and Tourism sent a request to CNE on March 2012 for the creation of a Working Group aimed at analysing the current situation regarding interoperability of metering systems. This aspect was included in Annex I of Directive 2009/72/CE concerning common rules for the internal market in electricity. One of the
conclusions reached by this Working Group was the need to develop a set of rules to regulate data access, exchange and data protection, taking into account the information available from smart meters.

Royal Decree 1011/2009 is coherent with the content of Gas Directive 2009/73/EC and Electricity Directive 2009/72/EC, as regards the development of secure, reliable and efficient non-discriminatory systems that are consumer oriented and also helping to ensure consumer protection.

These Directives 2009/72/EC and 2009/73/EC establish the consumers’ right to receive all the data regarding their consumption in an intelligible way and free of charge. These data can also be provided to any registered supplier free of charge. In this regard, Royal Decree 1011/2009 established that the database of gas and electricity DSOs’ supply points shall be at the disposal to any supplier but also to any customer.

**Public service obligations**

*Maintenance of end user price regulation in electricity*

Law 17/2007 established the schedule for the progressive phase out of the end-user regulated prices (the so-called “integral tariffs”) as well as for introduction of the last resort tariffs, which are aimed at consumers with low consumption levels in the electricity sector. The removal of integral tariffs is the final stage in the process to achieve a fully competitive market.

In this regards, Law 17/2007 defined last resort tariffs (LRT) as the price to be applied to consumers with right to be supplied at the LRT, and it also established the principles to be used in the calculation of last resort tariffs, which are the following:

- Single tariff for the whole country.
- Cost reflective (incomes enough to cover expenses).
- Additive structure: generation costs, access tariffs and commercialization costs.

The Order ITC/1659/2009 and Order 1601/2010 established the methodology to determine the last resort tariff. The last resort tariff includes the access tariffs, the commercialization costs and the energy cost.

The energy cost of the last resort tariff includes the price resulting in quarterly energy auctions (the so-called CESUR auctions), the ancillary service prices, a risk premium, the capacity payments and a factor for network losses.
According to the Law, the following last resort suppliers have appointed for a period of four years:

- Endesa Energía XXI, S.L.U.
- Iberdrola Comercialización de Último Recurso, S.A.U.
- Gas Natural S.U.R., SDG, S.A.
- HC-Naturgás Comercializadora Último Recurso, S.A.
- EON Comercializadora de Último Recurso, S.L.

It should be noticed that in Spain last resort suppliers can supply all customers, including those who are not eligible to be supplied at LRT.

The following table shows the percentage of customers in each segment, both domestic and other (commercial and industrial)\(^\text{44}\) who receive their supply from a last resort supplier in December 2012.

<table>
<thead>
<tr>
<th>Consumer Segments</th>
<th>2012 % of customers who receive their supply from the last resort supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>66.36%</td>
</tr>
<tr>
<td>Others</td>
<td>6.15%</td>
</tr>
</tbody>
</table>

\(\text{Table 39. Share of customers in each segment supplied by last resort supplier. Source: CNE.}\)

According to Order ITC/1659/2009, customers without any energy supply contract, who are not eligible to be supplied at LRT, are allowed to be supplied by last resort suppliers at a dissuasive regulated price (20% increase over the LRT price) during six months.

**Maintenance of end user price regulation in gas**

The Law 12/2007, dated 2\(^\text{nd}\) July, establishes the calendar for both the elimination of end-user regulated prices and the introduction of last resort tariffs (LRT), aimed at consumers connected to a gas pipeline pressure lower than 4 bars in the gas sector, since January 1\(^\text{st}\) 2008. As a consequence, distributors companies cannot retail gas to their clients anymore.

\(^{44}\) Low voltage consumers (less than 1 kV) with contracted load capacity lower than or equal to 10 kW.
The Law 12/2007 defines last resort tariffs as the price to be applied to with right to be supplied at the LRT and it also establishes the principles to be used in the calculation of last resort tariffs, which are the following:

- Single tariff for the whole country.
- Cost reflective (incomes enough to cover expenses).
- Additive structure: generation costs, access tariffs and commercialization costs.

The above mentioned Law also eliminated end-user regulated prices for consumers connected to a gas pipeline with design pressure above 4 bars and equal to or below 60 from July 2007 onwards. It also included the definition of last-resort suppliers and tariffs, the creation of the Supplier Switching Office, and the establishment of the Energy System Technical Management Monitoring Committee.

Since July 1st 2009 only consumers connected to gas pipelines with a pressure equal to or smaller than 4 bar and annual consumption of less than 50,000 kWh may be supplied at last resort tariffs in the gas natural sector.

According to the Law, the following last resort suppliers are appointed:

- Endesa Energía XXI, S.A.U
- Gas Natural SUR SDG, S.A.
- Iberdrola Comercialización de Último Recurso, S.A.U.
- HC-Naturgas Comercializadora Último Recurso, S.A.U.
- Madrileña Suministro de Gas S.U.R, S.L.

Order ITC/1660/2009, dated 22th June and Order ITC/1506/2010, dated 8th June, establish the mechanism for setting the maximum prices to be applied by last resort suppliers. The last resort tariff includes the rates, tolls and fees, the commercialization costs and the energy cost. The energy component of the last resort tariff includes the result of the gas auctions, and also the crude oil quotation and the settlement prices of the futures of natural gas in international markets.

In 31 December 2012, 94% of consumers had the right to be supplied at the last resort tariff. However, only 68% of consumers were supplied at the last resort tariff in 31 December 2012.

According to Royal Decree 104/2010, customers without any energy supply contract and not eligible to be supplied at TUR, are allowed to be supplied by last resort suppliers at a regulated tariff (TUR) during one month.
Vulnerable customers definition

The Royal Decree-Law 6/2009 approved the social bonus from July 1st 2009 onwards subject to the fulfilment of several requirements established by law such as being a large family, a pensioner older than 60 years with a minimum pension, families where all members are unemployed, or low voltage consumers (less than 1 kV) with contracted demand lower than or equal to 3 kW.

The abovementioned Royal Decree-Law established that the social bonus covers the difference between the last resort tariff and the integral tariffs that were in force at June 30th 2009.

The Royal Decree-Law 6/2009 also established the percentages to pay the cost of the social bonus by the generators. In February 2012, the Supreme Court abolished the financing system of the Social Bonus set up in the Royal Decree-Law 6/2009.

Consequently, the Royal Decree-Law 13/2012 and Order IET/843/2012 established that the cost of the social bonus (subsidy) shall be included as another cost to be covered by the access tariffs.

As of December of 2012, 2,544,170 customers enjoy social bonus subsidies.

Implementation of labelling for electricity (guarantees of origin)

The “guarantee of origin and disclosure of electricity system” was launched by CNE as of December 1st 2007, following the Order ITC/1522/2007, aiming to inform final electricity consumers about the origin and the environmental impact associated to their energy consumptions.

The issuing procedure has been regulated by the Circular 6/2012 issued by CNE on September 27th 2012.

Regarding European regulation, Directive 2001/77/EC on promotion of electricity generated by means of renewable energy sources (now superseded by Directive 2009/28/EC) established the need for such a guarantee of origin of the electricity purchased. Moreover, Directive 2004/8/EC also promoted the highly efficient cogeneration (combined heat & power). Afterwards, Directive 2009/72/EC obliged electricity retailers to inform their consumers via bills and promotional material about the contribution of each primary energy source during the previous year, as well as its environmental impact — at least in terms of CO₂ emissions and nuclear waste.
The guarantee of origin and disclosure of electricity system makes possible to certify the source of power generated from renewable sources or high-efficient cogeneration, thus determining both national annual global mix of primary sources and each supplier’s mix for the previous year, and their corresponding environmental impact associated.

Whenever a supplier wants to offer to his clients cleaner electricity (even 100% renewable or high-efficient cogeneration), that supplier has the possibility (regardless how clean “his” mix is) to take part in the guarantee of origin system and purchase additional guarantees to improve his mix versus the national mix. Additionally, supplier’s guarantees of origin can be applied to specific consumers, so as he can assure, in annual terms, that his energy comes from clean sources in a certain amount. Producers may then request the transfer of 'guarantees of origin' to end-users' suppliers, so that they can 'redeem' them by applying (i.e. cancelling) those guarantees to their clients' supply.

All this system is controlled by CNE, including inspections covering the accounting of guarantees issued and their use (cancellation). CNE annually publishes (by the end of March) the electricity labelling for each supplier, similar to the ones used for energy efficiency purposes in home electrical appliances, disclosing previous year retailer’s mix, CO₂ emissions and nuclear waste originated as compared to average nation-wide values. These data must be included, in a given format, in electricity bills and any promotional material to inform final customers.

5.2 Dispute settlement

5.2.1 Duties and powers of the regulatory authority of dispute settlement in the electricity market (Article 37(11), 37(5)(c), 37(4)(e))

Concerning complaints and dispute settlement, it must be taken into account that the electricity TSO (REE) is ownership unbundled, i.e. it is not a vertically integrated undertaking.

CNE is responsible for dispute settlement related to access to the transmission and distribution grids. The deadline for issuing a decision is the same that was required by the Directive (2 months) as set forth by Law 17/2007 of 4th July. The decision is binding for the agents involved in the dispute and could be appealed directly to the Court.

On the other hand, CNE shall act as an arbitration body in any disputes that may referred to it by agents carrying out activities in the electricity and hydrocarbon market.

In 2012, CNE settled eight disputes related to network access (mainly related to new wind farms and other generators of renewable energy).
Duties and powers of the regulatory authority of dispute settlement in the gas market (Article 41(11), 41(4)(e))

According to Function 13th of CNE, the NRA is entitled to solve disputes with regard to the contracts for third party access to the transmission and distribution networks on any terms that may be set in regulations. Moreover, concerning gas market, CNE is responsible for solving any disputes that may be taken to it with regard to the technical management of the natural gas system.

The decision is binding for the agents involved in the dispute and should be appealed directly to the Court.

Additionally, CNE shall act as an arbitration body in any disputes that may referred to it by agents carrying out activities in the electricity and hydrocarbon market.

In 2012, CNE settled one conflict related to a reduction provided by the technical manager of the system of the capacity reservation made for a LNG plant for under-utilisation of the capacity reserved which caused the refusal of other agents’ access.
List of tables

Table 1. Relevant stakeholders in RED ELECTRICA CORPORACION S.A. ........................................22
Table 2. System Adjustment Services in the Spanish Peninsular Electrical System 2011-2012 .... 25
Table 3. Secondary reserve (regulation capacity) market shares; Years 2010-2011-2012 .............. 25
Table 4. Tertiary reserve plus deviation management market shares; Years 2010-2011-2012 ...... 26
Table 5. ENS (energy not supplied) and TIM (average interruption time in minutes) 2007-2011. .. 26
Table 6. Results of the auctions forward contracts 2012 and 2013 PT-ES.................................... 33
Table 7. CESUR Auctions: results of CESUR auctions in 2012..................................................... 47
Table 8. Companies’ market shares of available generation capacity in ordinary regime 2012 .... 48
Table 9. Companies’ market shares in electricity generation (2012) .......................................... 49
Table 10. Yearly average and quarterly prices of last resort tariff without hourly discrimination..... 51
Table 11. Yearly average and quarterly prices of last resort tariff with hourly discrimination....... 52
Table 12. Yearly average and quarterly prices of last resort tariff with hourly discrimination (three periods). .......................................................................................................................................... 52
Table 13. Electricity Switching 2009-2012 .................................................................................. 55
Table 14. Access tariffs evolution.................................................................................................. 61
Table 15. Installed generation capacity structure in the Spanish mainland electricity system ..... 65
Table 16. Balance of the Spanish electricity system..................................................................... 66
Table 17. Changes in generation facilities under ‘ordinary regime’ commissioned in 2012 ......... 67
Table 18. Expected evolution of consumption for the Spanish Mainland in the period 2013-2016.69
Table 19. Expected Peak Demand (MW) for the Spanish Mainland in the period (2013-2016)...... 69
Table 20. Expected firm available capacity installed in winter and summer (2013-2016).......... 70
Table 21. Expected reserve margin rate in winter and summer. Period 2013-2017 ..................... 70
Table 22. Shareholding structure of ENAGAS. ......................................................................... 72
Table 23. Auctions for underground storage of natural gas: results of auctions 2009-2012 ...... 82
Table 24. Natural gas border prices in Spain, 2012..................................................................... 93
Table 25. Main features – OTC.................................................................................................. 95
Table 26. Auctions for operating and minimum filling level gas: results of the auctions held 2009-2012 ................................................................................................................................................. 99
Table 27. Auctions for natural gas for last resort supply: results of the auctions held in 2012...... 100
Table 28. Natural gas consumption and number of consumers in 2012 .................................... 107
Table 29. Gas switching data 2009-2012..................................................................................... 111
Table 30. Gas demand in Spain in 2012 vs 2011. ...................................................................... 115
Table 31. Gas imports in Spain 2012 vs 2011. ............................................................................ 116
Table 32. Gas imports in Spain 2012. ........................................................................................ 116
Table 33. Forecast of annual gas demand 2013-2016
Table 34. Capacity of LNG terminals at Dec, 31 2012
Table 35. Interconnection physical capacities at Dec, 31 2012
Table 36. Available physical average capacities in 2012. (LNG terminal and Interconnections)
Table 37. Planned LNG infrastructures for 2013-2015
Table 38. Storage capacity in Spain: underground storages, LNG tanks and pipelines
Table 39. Share of customers in each segment supplied by last resort supplier

List of figures

Figure 1. TIM (minutes) due to events in the transmission network until 2011
Figure 2. Evolution of TIEPI until 2011
Figure 3. Exchange capacity and market matched energy between Spain and France in 2012
Figure 4. Congestion rents and % of hours of daily market splitting in 2012 Spain-Portugal
Figure 5. Exchange capacity and market matched energy between Portugal and Spain in 2012
Figure 6. Exchange capacity and market matched energy between Spain and Morocco in 2012
Figure 7. European electricity day-ahead market prices in 2012
Figure 8. Accumulated OTC volume traded in one year (TWh) (2007-2012)
Figure 9. Evolution of accumulated traded volumes per year in OMIP auctions and continuous market, and OTC volumes registered in OMIP and MEFF Power (TWh) 2007-2012
Figure 10. Evolution of daily spot prices and month, quarter and year futures prices 2012
Figure 11. Evolution of electricity deficit 1998-2012
Figure 12. Evolution of access costs in million € and breakdown in categories
Figure 13. Share of tariff deficit
Figure 14. Rolling annual consumption growth in %
Figure 15. Installed generation capacity in the Spanish mainland system at the end of 2012
Figure 16. Evolution of natural gas border prices in Spain 2002-2012
Figure 17. Balancing and trading points
Figure 18. Spanish OTC gas market vs. consumption 2012
Figure 19. Gas traded in the OTC market in 2012
Figure 20. Gas transactions in the OTC market in 2012 (n° Transactions/month)
Figure 21. Market share (purchases) in the OTC market in 2012
Figure 22. Consumers at the Last Resort Tariff vs consumers at free market price
Figure 23. Share of natural gas supplies by company (in energy volume)
Figure 24. Share of natural gas supplies by company (in energy volume)
Figure 25. Consumption of natural gas by sectors (2012) ........................................................... 105
Figure 26. Natural gas sales in Spain (GWh) ........................................................................... 106
Figure 27. Spanish retail gas market. Sharing-out in terms of energy ....................................... 108
Figure 28. Sources of gas imported to Spain in 2012 ............................................................... 115
Figure 29. Use rate of LNG terminals in 2012 ...................................................................... 118
Figure 30. Interconnection capacity between Spain and France .............................................. 123