





Table of contents

1.	Forewo	rd	
2.	Main de	velopments in the gas and electricity markets	5
2	2.1. Ma	n developments in the electricity markets	13
2	2.2. Ma	n developments in the gas markets	14
3.	The ele	ctricity market	14
З	8.1. Net	work regulation	14
	3.1.1.	Unbundling	
	3.1.2	Technical functioning	17
	3.1.3	Network tariffs for connection and access	22
	3.1.4	Cross-border issues	23
	3.1.5	Compliance	
3	8.2 Pro	moting Competition	
	3.2.1	Wholesale markets	29
	3.2.2	Retail market	42
Э	8.3 Sec	curity of supply (if and insofar as NRA is competent authority)	50
	3.3.1	Monitoring balance of supply and demand	50
	3.3.2	Monitoring investment in generation capacities in relation to SoS	
	~ ~ ~		F 0
	3.3.3	Measures to cover peak demand or shortfalls of suppliers	
4		Measures to cover peak demand or shortfalls of suppliers	
	The gas		57
	The gas	market	57 57
	The gas 1 Net 4.1.1 4.1.2	market work regulation Unbundling Technical functioning	57 57 57 63
	The gas 1.1 Net 4.1.1 4.1.2 4.1.3	market work regulation Unbundling Technical functioning Network and LNG tariffs for connection and access	57 57 57 63 65
	The gas 4.1 Net 4.1.1 4.1.2 4.1.3 4.1.4	market work regulation Unbundling Technical functioning Network and LNG tariffs for connection and access Cross-border issues	57 57 57 63 65 66
4	The gas 4.1 Net 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5	market work regulation Unbundling Technical functioning Network and LNG tariffs for connection and access Cross-border issues Compliance	57 57 57 63 65 66 68
4	The gas 4.1 Net 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 4.2 Pro	market work regulation Unbundling Technical functioning Network and LNG tariffs for connection and access Cross-border issues Compliance moting Competition	
4	The gas 4.1 Net 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 4.2 Pro 4.2.1	market work regulation Unbundling Technical functioning Network and LNG tariffs for connection and access Cross-border issues Compliance moting Competition Wholesale markets	57 57 63 65 66 68 69 69
4	The gas 4.1 Net 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 4.2 Pro 4.2.1 4.2.2	market work regulation Unbundling Technical functioning Network and LNG tariffs for connection and access Cross-border issues Compliance moting Competition Wholesale markets Retail market	
4	The gas 4.1 Net 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 4.2 Pro 4.2.1 4.2.2 4.2.3	market work regulation Unbundling Technical functioning Network and LNG tariffs for connection and access Cross-border issues Compliance moting Competition Wholesale markets	
4	The gas 4.1 Net 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 4.2 Pro 4.2.1 4.2.2 4.2.3 effective	market work regulation Unbundling Technical functioning Network and LNG tariffs for connection and access Cross-border issues Compliance moting Competition Wholesale markets Retail market Recommendations on supply prices, investigations and measures to	
4	The gas 4.1 Net 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 4.2 Pro 4.2.1 4.2.2 4.2.3 effective	market work regulation Unbundling Technical functioning Network and LNG tariffs for connection and access Cross-border issues Compliance moting Competition Wholesale markets Retail market Recommendations on supply prices, investigations and measures to competition	
4	The gas 4.1 Net 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 4.2.1 4.2.2 4.2.3 effective 4.3 Sec 4.3.1. 4.3.2	market work regulation Unbundling Technical functioning Network and LNG tariffs for connection and access Cross-border issues Compliance moting Competition Wholesale markets Retail market Recommendations on supply prices, investigations and measures to competition curity of supply (if and insofar as NRA is competent authority) Monitoring balance of supply and demand Expected future demand and available supplies as well as envisaged	
4	The gas 4.1 Net 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 4.2 Pro 4.2.1 4.2.2 4.2.3 effective 4.3 Sec 4.3.1. 4.3.2 capacity	market work regulation Unbundling Technical functioning Network and LNG tariffs for connection and access Cross-border issues Compliance moting Competition Wholesale markets Retail market Recommendations on supply prices, investigations and measures to competition curity of supply (if and insofar as NRA is competent authority) Monitoring balance of supply and demand Expected future demand and available supplies as well as envisaged	
4	The gas 4.1 Net 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 4.2 Pro 4.2.1 4.2.2 4.2.3 effective 4.3.1 4 4.3.2 capacity 4.3.3	market work regulation Unbundling Technical functioning Network and LNG tariffs for connection and access Cross-border issues Compliance moting Competition Wholesale markets Retail market Recommendations on supply prices, investigations and measures to competition curity of supply (if and insofar as NRA is competent authority) Monitoring balance of supply and demand Expected future demand and available supplies as well as envisaged	



1. Foreword

A new authority

Since October 2013, the Spanish National Authority for Markets and Competition (CNMC) is the new national regulatory authority with responsibility in competition law enforcement as well as in regulation, market monitoring and dispute settlement in certain markets and sectors, including electronic communications, audio-visual, electricity and natural gas, postal, airports and railways. This merger has resulted in a single authority for ensuring the proper and transparent functioning of markets and the existence of effective competition, for the benefit of consumers.

Our Mission, Our Objectives

The new authority is created on the philosophy of ensuring competitive and wellfunctioning markets and quality services for the benefit of customers and SMEs. In this regard, our guiding principles to fulfil our tasks are to pursue the maximum efficiency in the functioning of regulated markets and remove obstacles that hamper competition, to act independently and foster transparency, to ensure predictability and regulatory stability, and gain from synergies of different frameworks to give a common and global solution to similar problems.

These goals are intrinsically linked to our common objectives at European level: to establish the European internal energy market, create a stable investment climate, foster reliable energy supply and protecting and empower consumers enabling them to make well-informed choices.

Our approach

This period of commissioning and operation is being equally challenging and exciting; as a single and independent regulatory body, CNMC benefits from a global vision of economic activity, enjoys a unique position to exploit synergies derived from competition and regulatory knowledge and benefits from strong human capital inherited from the merging agencies. On the other hand, CNMC has a large set of tools, including monitoring, regulation, anti-trust and competition advocacy to fulfill its targets: improving competition and efficiency of markets in the benefit of consumers.

However, we are also aware of the challenge that constitutes the supervision of different markets with such a complexity. For that reason, effective cooperation and exchange of good regulatory practices with European and International NRAs are essential to perform our duties.



To sum up, the body I preside over firmly believes in the importance of the role and activities of national regulatory authorities and their independence from other consolidated interests while regulating energy markets and infrastructures in order to promote competition and efficiency and to provide a sound defense for consumers and, in a special way, customers in the electricity and gas markets.

With this report CNMC accounts for its regulatory tasks in energy and provides an insight into the Spanish energy market for both electricity and gas in 2013, pursuant to articles 37.1.e) and 41.1.e) of Directives 2009/72/EC and 2009/73/EC, respectively.

Jose Maria Marin-Quemada President



2. Main developments in the gas and electricity markets

From CNE towards CNMC

On 5th June 2013, the Spanish Official Journal (BOE) published **Act 3/2013**, dated 4th June, on the creation of the Spanish Authority for Markets and Competition (CNMC). The objective of this Act is the constitution of a single and independent body with responsibility in competition law enforcement as well as in regulation, market monitoring and access conflict settlement in certain markets and sectors, including electronic communications, audiovisual, electricity and natural gas, postal, airports and railways.

CNMC is a public body with its own legal personality and the capacity to act independently. In the field of energy, its objectives are to ensure, preserve and promote the proper functioning, transparency and effective competition in the energy market, for the benefit of consumers. In particular, article 7 of the Act 3/2013 establishes the functions that CNMC shall carry out to supervise and control the proper functioning of the electricity and natural gas sectors, among others:

- Set out the methodology for calculating the access tariffs to electricity grids corresponding to transmission and distribution costs; relating to access to cross-border infrastructures, including procedures for allocating capacity and managing congestion; concerning the provision of balancing services between systems managed by different operators; for calculating tariffs for basic services involving access to gas facilities transport and distribution, regasification, storage and tanker loading-.
- Supervise the management and allocation of interconnection capacity, the time taken by transport and distribution companies to make connections and repairs, as well as the mechanisms designed to deal with capacity congestion in the grids.
- Supervise and certify the separation of the activities of transport, regasification, distribution, storage and supply in the gas sector, and the activities of generation, transmission, distribution and supply in the electricity sector, and in particular their functional separation and the effective separation of accounts in order to avoid crosssubsidising between these activities (Unbundling).
- Ensure compliance with the regulations and procedures established relating to switching supplier.
- In the natural gas sector, monitor conditions of access to storage, including underground storage, liquefied natural gas (LNG) tanks and gas stored in the pipelines, as well as other ancillary services.
- Supervise the connection conditions and tariffs applicable to new electricity producers.

• Supervise the investment plans of TSOs, particularly with regard to their alignment with the development plan for the grid in the European Union context, and make any necessary recommendations for their modification.

CNMC COMISIÓN NACIONAL DE LOS MERCADOS Y LA COMPETENCIA

- Ensure compliance with contractual freedom regarding interruptible supply contracts and long-term contracts, providing they are consistent with applicable legislation and European Union law.
- Ensure compliance with standards regarding the safety and reliability of the grids.
- Ensure compliance by TSOs and DSOs and grid owners with the obligations imposed by applicable law, including cross-border issues.
- Supervise the fulfilment of prices and conditions of supply to end consumers with the provisions of the Electricity and Hydrocarbons Acts, and issue recommendations at least annually to ensure public service obligations and consumer protection.
- Ensure access for customers to their consumption data, in an understandable format, and in a quick and harmonised manner.
- Identify agents whose actions deficiencies in the supply to customers are attributable, proposing the measures that should be adopted.
- Ensure transparency and competition in the electricity and natural gas sectors, including the level of wholesale prices, and ensuring that the electricity and gas companies comply with their transparency obligations.
- Supervise the degree and effectiveness of market openness and competition in the wholesale and retail markets, including complaints made by consumers of electricity and natural gas and regulated electrical energy forward contract auctions.
- Supervise investments in generating capacity that would ensure security of the supply.
- Contribute towards the compatibility of data exchange systems in market processes at regional level.
- Determine, on an annual basis, the main and dominant operators and the other functions relating to such operators.
- In relation to the deficit of the regulated activities and their funding mechanisms, it shall maintain and provide the information that is determined, issue such reports, statements, certificates and notices as may be required, and perform the necessary calculations in coordination with the Ministry of Industry, Energy and Tourism.



- Issue guarantees of the origin of electricity from renewable energy sources and from high-efficiency cogeneration.
- Publish the final prices of the electricity market based on information from the market operator and the system operator.
- Manage the price comparison tool for electricity and gas prices on the basis of the offers made by suppliers, and draft reports containing the comparison and evolution of prices in the electricity and gas retail markets.
- Act as the supervisory body of the auctions for the purchase of natural gas for setting the last resort tariff, the minimum gas level for tanks and pipelines and the gas reserve stored underground, as well as the basic storage capacity.
- Inspect compliance with the requirements of natural gas and electricity marketers as well as the loads managers and direct market consumers.
- Issue a report on applications for authorization, modification or closure of facilities, the energy planning process, applications for approval or authorization of economic or remuneration regimes.
- Issue such circulars developing and implementing rules contained in Royal Decrees and Orders of the Minister of Industry, Energy and Tourism.

Moreover, the Act 24/2013 of the Electricity Sector, which came into force on December 28th 2013, provide other functions to this Authority related to Regulation (EU) N^{\circ} 1227/2011 (REMIT).

The Board of CNMC is entitled to adopt the Authority'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 Directorates have the responsibility of the preliminary investigations: Competition Directorate, Telecommunications and Audiovisual Sector Directorate, Energy Directorate and Transport & Postal Services Directorate.

Additionally, **Royal Decree 657/2013**, of 30 August, set up CNMC's By-law which determines, among other issues, the distribution of items on the Board's agenda between the plenary sessions and the Chambers meetings, and the functions and internal structure of the Directorates and other areas of responsibility.

The CNMC's legal regime is accompanied by the Act 20/2013 on the Guarantee of the Market Unity, which establishes the necessary measures to reinforce the effective application of the principle of market unity in the country. In particular, it aims to facilitate the exploitation of



economies of scope and scale in the market, enhancing free access and exercise principles, as well as ensuring adequate market supervision.

According to these legal requirements, CNMC has legal duties to guarantee the free access and exercise principles. CNMC will form part of the contact point network for market unity and dispute settlement (established by the Law), and will have the right to challenge in courts decisions or regulations of public administrations going against domestic market unity. This will add a market efficiency approach - from this independent Authority- to the resolution system.

The electricity reform

2013 has been the year of the electricity reform in Spain, aiming to encourage efficiency, transparency and competition in the electricity sector, as well as to reduce the tariff deficit incurred during the latest years and strengthen the financial stability of the electricity market.

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

This legislation encompasses a set of regulatory changes applicable to the Spanish electricity sector and affecting the special regime installations (renewable and cogeneration) with the objective of correcting the tariff deficit and reinforcing financial stability.

According to the former regime, 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 eliminated this reference premium for all technologies, amending in this regard Royal Decree 661/2007.

Thus, following the entry into force of this new legislation (January 1st 2013), the two options were 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 was modified by excluding from it price variations in energy and food products and any impact due to tax changes.

Additionally, **Royal Decree-Law 9/2013** set out a series of broad-ranging measures aimed at guaranteeing financial stability in the electricity system as an essential requirement for ensuring its economic sustainability and the security of supply.

The targets of this legal provision were:





- To establish a regulatory framework to guarantee financial stability in the electricity system.
- To remove deficit in the electricity sector, preventing future deficit and guaranteeing supply to consumers at the lowest possible cost and with increased transparency.
- To simplify and clarify electricity bills and encourage competition in domestic electricity tariffs, while maintaining the discount known as the "social bonus" for vulnerable customers.

However, the cornerstone of the reform of the power sector in Spain is the Act 24/2013 of the **Power Sector**, published on 27th December 2013 in the Spanish Official Journal.

This Act sets forth the regulatory framework of the Power Sector with the objective to guarantee the electricity supply with an adequate level of quality, at the least possible cost, while ensuring the economic and financial sustainability of the system and pursuing effective competition in the power sector. At the same time, the principle of environmental sustainability has been considered.

The Act contains 80 articles, 20 additional clauses, 16 interim clauses, 1 derogatory clause and 6 concluding clauses. It is structured in 10 chapters: General provisions, organisation of the system, economic and financial sustainability, electricity generation, technical and economic management, transmission, distribution, supply, authorisation regime, inspection and infringement regime.

The economic and financial sustainability will be the guiding principle for both the Public Administration and the agents acting under the scope of this Act, with a view to avoid the accumulation of new tariff deficits. According to the new Act, incomes must be enough to cover expenses and, on the other hand, tariffs and charges must be automatically reviewed in case of overcoming certain established thresholds.

On the other hand, some legal aspects of the renewable energy installations (RES) have been modified. In order to promote competition and reduce distortions in the markets, the law obliges all RES installations to sell the produced electricity in the market receiving the price market together with a regulated revenue. The Act sets forth the principle of reasonable profit for the sake of which the parameters to determine the regulated income are reviewed every six years.

In addition, the Act establishes the priority access and dispatching of RES and high efficiency CHP (Combined Heat and Power) in line with the European Directives, and further develops the general criteria for access and dispatching by reinforcing the principles of objectivity and non-discrimination. Thereby, the reasons to refuse access will be based on technical criteria exclusively.

Moreover, the Act develops a specific regulatory framework for self-consumption. It is remarkable that the Act defines three different categories of self-consumption and obliges those installations connected to the grid to contribute to the costs and services of the system in the





same conditions of the rest of customers. The Act defines also the activity of "recharging managers" (for electric vehicles).

Additionally, the so called "voluntary price for small consumer" is set up which determines the maximum reference price to be paid for those customers, under certain contracted load capacity threshold, who choose this option instead of contracting with a supplier in the free market. Furthermore, the concept of "vulnerable customer" is defined according to certain social and economic conditions and consumption patterns.

Finally, the infringement regime is strengthened, reinforcing the public authorities' duties on inspectorate, record of activities and fraud control. In particular, the new regime strengthens the NRA's responsibilities for imposing penalties.

This Act entered into force on 28 December 2013.

The electricity tariff

The twenty-fifth "CESUR" auction (Last Resort Energy Supply Contracts) to determine the cost of energy to be integrated in calculation of Small Consumer Voluntary Price (replacing the Last Resort Tariff) was held on 19 December 2013.

On 20 December the Spanish Authority for Markets and Competition (CNMC) issued its report declaring that the results of the auction could not be validated in view of atypical circumstances, considering that the auction was held in an energy context that could not be extrapolated to the first quarter of 2014.

Thus, a ruling on 20 December 2013 by the Secretary of State for Energy established that the price arising from the twenty-fifth CESUR auction could not be considered for the determination of the estimated cost of wholesale contracts for the first quarter of 2014. As a result, in accordance with regulations the auction was cancelled for all effects.

Afterwards, on 28 December 2013 the Spanish Official Journal published **Royal Decree Law 17/2013** determining the price of electricity contracts subject to Small Consumer Voluntary Price tariff in the first quarter of 2014. The Royal Decree Law set the base and peak prices for calculating the energy costs to be included in the Small Consumer Voluntary Price, considering the base and peak references of the public prices of the Iberian Energy Derivatives Exchange (OMIP) for Q1-14 in the last six months of trading available at the date of approval of Royal Decree Law 17/2013. This changed the Small Consumer Voluntary Price as of 1 January 2014, by 1.4% while access tariffs remained unchanged.

The legal provision on electricity tariffs for households was further developed by **Royal Decree 216/2014.**



According to this, the *Voluntary Price for the Small Consumer* (PVPC¹) is defined as the price resulting from applying the calculation methodology by the Government at which the selling companies referred to consumers of low voltage electrical energy with a contracted power supply of less than or equal to 10 kW and who have not chosen to contract a commercial offer or who are eligible for the PVPC.

The new system came into force on 1 April 2014. The power companies are being given a maximum period of three months to issue bills according to the new system (July 1st).

During this transitional period, those bills that are issued must be calculated according to the price of electricity in the first quarter (48 euros/MWh).

The first invoices to be issued to end-customers under the new system will contain an adjustment of this price to the real market price and a refund will be paid as the price of electricity in the market during the first quarter was lower than the price that was set up.

Companies are required to offer, as an alternative to the PVPC, a fix price for a whole year. It is possible to compare these offers on the CNMC website since last April 15.

These prices will be applied to all residential consumers, whether they have smart meters with hourly metering or not. In the latter, prices will be based on the profiles that Red Eléctrica draft with the new methodology approved by the Government and will be published and updated weekly on Red Eléctrica's "eSios" website. CNMC has set up a working group with stakeholders to define the procedures for meter data validation and preserve the security and confidentiality of data management between DSOs and suppliers.

According to the Ministerial Order IET/290/2012, all customers must have a smart meter installed by 2018, but this implementation is being gradual.

Retribution of transmission and distribution activities

On 30 December 2013, **Royal Decree 1047/2013** was published, providing the methodology for calculating electricity transport remuneration for 2014. The remuneration of electricity transmission is regulated, and an amount is set for each player that takes into account the accredited costs of investment, operations and maintenance of the facilities of each company, plus an availability incentive.

Additionally, **Royal Decree 1048/2013** was also published, providing the methodology for calculating electricity distribution remuneration for 2014.

Up to 1 July 2009, distributors were also the owners of the distribution facilities, managers of the low tension grid and the final customer bundled tariff electricity suppliers. However, as from 1 July 2009, distributors' duties have been restricted to the management of the distribution

¹ The acronym in Spanish for Voluntary Price for Small Consumers.



networks, and, as the case may be, the supplier companies in each group are in charge of the last resort supplies.

Security of supply

On 30 October 2013 the Spanish Official Journal published **Act 17/2013**. This Law aimed to improve security of supply and increase competition in non-mainland electricity systems.

According to this legislation, for reasons of safety or technical and economic efficiency, additional remuneration to the mainland spot market price may be given for new generation facilities in non-mainland electricity systems, even if power output required to cover demand is exceeded.

The new regime will not be applied to new facilities in non-mainland electricity systems (either under the ordinary or special regimes) owned by a company or business group which holds more than 40% of generating power in the system. An exception is made in the case of facilities awarded through capacity tenders for the deployment of renewable energy sources holding administrative authorisation or have been registered in the remuneration pre-assignment register for the CHP/renewable regime. Another exception is made for investment in upgrading and improving efficiency at plants already in operation which do not entail an increase in capacity or where there are no other agents interested in developing facilities.

The System Operator will be the owner of pumped-storage hydro plants in these non-mainland electricity systems intended to guarantee security of supply, or the integration of renewable sources. In all other cases an award procedure will be carried out. Notwithstanding the above, any company holding a hydroelectric operating concession granted before 1 March 2013, or which had been granted administrative authorisation but had not been granted authorisation to bring the plant on stream, will retain ownership but will be liable for a guarantee amounting to 10% of the total investment and adhere to an execution timetable.

Regasification plants in non-mainland electricity systems will be exclusively owned by the Technical System Operator, and the facilities concerned must be transferred within 6 months at market price. If the facility does not have administrative authorisation, the price will be limited to the total costs actually incurred up to 1 March 2013.

Consumers' protection (see Chapter 5)

During 2013 and the beginning of 2014, the Spanish regulatory framework of consumers' protection has also been reinforced.

On one hand, the general framework for Consumers protection was modified by the Act 3/2014 revising the text of General Act for Consumers Protection and transposing into the Spanish law the Directive 2011/83/EU of 25 October on Consumer Rights.





This new legal provision obliges traders to adopt the new set of contractual guidelines as from June 13, 2014. In this regard, it is important to mention that the legal provisions are also applicable to electricity and gas contracts.

On the other, the new **Electricity Act 24/2013** introduces important provisions on customers, some of them derived from the Third Package and others proposed by the Spanish NRA. In particular, CNMC is entitled to monitor the effectiveness and application of consumer protection measures and may issue legally binding resolutions aimed at their fulfilment.

2.1. Main developments in the electricity markets

Probably the main development took place by the end of the year 2013 with the publication of Act 24/2013 of the Power Sector. This Act depicts a new framework with many substantial implications.

Regarding networks, the Spanish electricity TSO is certified since July 2012 according to the ownership unbundling model. Furthermore, CNMC is preparing its first formal report on the supervision of DSOs unbundling. No major developments took place in the area of technical functioning throughout 2013. As regards network tariffs, CNMC is currently elaborating the methodology for transmission and distribution access tariffs.

Significant progress has been achieved recently with regard to cross border trade: namely, the launch of coordinated FTRs in the Portuguese-Spanish interconnection and the successful launch of market coupling in May 2014, between MIBEL and North-West Europe, in the French-Spanish interconnection. Furthermore, cross border balancing exchanges between Portugal and Spain, and between Spain and France under the BALIT platform have been launched successfully in June 2014.

In the wholesale market venues, there are not important changes as regards prices, volumes and competition indicators. However, it is worth to highlight:

- Volumes negotiated in OMIP and registered in BME Clearing are increasing.
- CESUR auctions that established former last resort tariffs (based on ex ante quarterly auctions) have been replaced by a new retail model called "voluntary price for small consumers", which is based on spot market prices (ex post model).
- Switching rate in the electricity retail market has maintained growth during 2013.

As previously mentioned, a number of measures were taken by the Government to reduce the tariff deficit.

Finally, as regards security of supply, in the short term, problems are not expected. The medium term prospects are also good.



2.2. Main developments in the gas markets

Regarding network issues, the Spanish gas TSO has been certified according to the ownership unbundling model. Throughout 2013, Reganosa requested to be certified under ownership unbundling model and Enagás Transporte S.A.U. under Independent System Operator (ISO) model for primary gas transport trunk networks owned by SAGGAS and by ETN. The certifications have been issued and duly notified to the European Commission by CNMC. Furthermore, CNMC is preparing its first formal report on the supervision of DSOs unbundling and is currently elaborating the methodology for transmission and distribution, regasification, storage and tank truck fill-up access tariffs.

In relation to cross border trade issues, crucial steps have been given towards the completion of the gas internal market. CNMC, in cooperation with CRE and ERSE, TSOs and all other stakeholders, is currently working on the early implementation of capacity allocation management network code. As a result, on 3rd March 2014 the first coordinated auction of yearly products in all virtual interconnection points within the South Gas Regional Initiative (SGRI) -namely France, Spain and Portugal- took place.

With regard wholesale market, it is remarkable that CNMC and the Ministry of Industry, Energy and Tourism, beside all stakeholders, are working in parallel with the South Gas Regional Initiative to analyse and discuss the regulatory measures needed to remove all the regulatory barriers to develop a gas hub. The new hub is expected to be in operation by January 2015.

A number of measures have been taken by the Government in 2013 in order to eliminate the tariff deficit.

Finally, as regards security of supply, no problems are expected in the short and medium term.

3. The electricity market

3.1. Network regulation

3.1.1. Unbundling

TSO certification

Act 3/2013 sets forth that CNMC will be in charge of the certification procedure as foreseen by the Directives. In Spain, there is a single TSO for electricity: Red Electrica de España (REE).

On 4th November 2011, REE submitted a notification requesting to be certified. The Spanish NRA dealt with the certification procedure and submitted a preliminary decision to the EC on 28th March 2012 proposing the certification of REE as an Ownership Unbundled TSO. REE was certified on 19th July 2012. Following the certification of the Spanish TSO, CNMC monitors the compliance with the certification requirements.



Article 11 of Directive 2009/72/EC (certification with regard to third countries and the corresponding implications on security of supply) is not applicable since REE is not controlled by persons from a third country.

The current legislative framework set forth in the Act 24/2013 of the Power Sector represents the consolidation of the single TSO model in the Spanish System.

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.

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 than 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:

RED ELECTRICA CORPORACION, S.A. Significant shareholders	% Direct shareholding	% Indirect Shareholding
Sociedad Estatal de Participaciones Industriales (SEPI)	20,00	
TALOS CAPITAL LIMITED	3,087	
FIDELITY INTERNATIONAL LIMITED		1,066
HSBC HOLDINGS, PLC		3,239
THE CHILDREN'S INVESTMENT FUND MANAGEMENT (UK) LLP		3,087

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



DSO unbundling

Article 12 of the new Act of the Power Sector (Act 24/2013, of 26th December) (former article 14 of repealed Power Sector Act, Act 54/1997), sets forth unbundling requirements for DSOs in line with the Directive 2009/72.

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, 2011, 2012 and 2013, vertically-integrated companies have implemented their compliance programs (code of conduct for unbundling activities) and submitted required reports on the unbundling measures to the Spanish NRA and to the Ministry. The Spanish NRA 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:
 - o The revision of procedures of access to that information,
 - The introduction of confidentiality clauses in contracts signed with third parties,
 - \circ $\,$ 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 transposed by Royal Decree-Law 13/2012. No DSO has rebranded in Spain and 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. CNMC is now monitoring due compliance by companies of their rebranding obligations, analysing relevant information regarding this issue sent by them. As a result of this analysis, CNMC may request companies to rebrand, in case it concludes those obligations are not being fully fulfilled.

In execution of its general powers, the Spanish NRA 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.

The Spanish NRA stated in the above mentioned report that the distribution system operators had already established their compliance programme. Therefore, undertakings had 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.

Act 3/2013 has introduced an explicit and clear function for CNMC consisting of monitoring the functional unbundling among the activities of generation, transmission, distribution and supply in the electricity sector.

When drafting this report, CNMC is preparing its first formal report on the supervision of DSOs unbundling, in execution of the aforementioned function. Hence, CNMC is monitoring the implementation of unbundling 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

Setting the methodology for the provision of balancing services has been entitled to CNMC by Act 3/2013. 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)	

	2012		2	013	Δ%2	013/2012
	Upwards	Downwards	Upwards	Downwards	Upwards	Downwards
Supply guarantee constraints ²	12.008	-	4.085	-	-65,98	-
Technical constraints ³	6.162	61	7.240	193	17,49	217,54
Additional Upward Power						
Reserve ⁴ (GW)	1.636	-	3.010	-	84,02	-
Secondary reserve availability ⁵						
(MW)	709	522	691	512	-2,47	-2,01
Secondary reserve usage	1.510	1.262	1.806	1.070	19,55	-15,22
Tertiary reserve	2.992	2.330	3.330	1.812	11,32	-22,25
Deviation management service	2.658	1.232	2.347	905	-11,72	-26,53
Real time constraints ⁶	635	484	558	1.700	-12,10	251,46

 Table 2. System Adjustment Services in the Spanish Peninsular Electrical System (years 2012-2013)
 Source: REE

Network security and reliability rules

CNMC 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.)

Act 3/2013 entitled CNMC to monitor the compliance with network security and reliability rules. 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). The following table shows last available data regarding TIM and ENS, both for the Spanish Peninsula and for Canary and Balearic Islands.

² RD 134/2010 modified by RD 1221/2010

³ Technical constraints PBF (P.O.3.2.)

⁴ Total annual reserve (GW)

⁵ Average hourly capacity availability (MW)

⁶ Includes bond energy redispatches Peninsular Electrical System -Balearic Electrical System



		ENS (MWh)	TI	M (minutes)		
	Peninsula	Balearic Islands	Canary Islands	Peninsula	Balearic Islands	Canary Islands
2008	574	7	1.043	1,15	0,64	58,94
2009	437	39	1.679	0,91	3,41	96,89
2010	1.571	9	4.090	3,17	0,77	241,68
2011	280	39	17	0,58	3,54	1,02
2012	133	7	10	0,28	0,62	0,61

 Table 3. ENS (energy not supplied) and TIM (average interruption time in minutes)
 Source: REE

It is important to point out that the value of TIM in the Spanish Peninsula in 2012 is the lowest since 1992. The following figures show the evolution of TIM and ENS since 1992 in the Spanish Peninsula.



Figure 1. ENS (energy not supplied) due to events in the transmission network until 2012 (MWh).

Source: REE

CNMC COMISIÓN NACIONAL DE LOS MERCADOS Y LA COMPETENCIA



Figure 2. TIM (minutes) due to events in the transmission network until 2012 Source: REE

Regarding grid availability index (ID), the value for the Spanish Peninsula was 97,79% in 2012. In the Canary and Balearic Islands ID was 98,83% and 98,07%, respectively.

Act 24/2013 of the Power Sector (article 14) lays down the foundations for the remuneration system for various activities aimed at the supply of electricity. It establishes that the remuneration for the activities will be set by regulations based on objective, transparent and non-discriminatory criteria that provide incentives to increase the efficiency of the management, the economic and technical efficiency of the activities and the quality of the electricity supply.

In this sense, one of the objectives of Royal Decree 1048/2013 is to establish: the methodology for determining the amount of remuneration to be paid to companies engaged in electricity distribution activities in order to guarantee the suitable provision of the service, while providing incentives to improve the quality of supply and to reduce losses on the distribution grids with uniform standards throughout the country and at a minimum cost for the system. Article 6 of RD 1048/2013 establishes that CNMC shall elaborate an annual report including quality indexes of all distribution companies.

CNMC 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).



Monitoring time taken to connect and repair

This monitoring duty has been assigned to CNMC by Act 3/2013. In the past, the Spanish NRA performed this monitoring on the basis of a previous mandate contained in the former Power Act.

As regards the "time to connect", this is regulated by Royal Decree 1955/2000 (article 103). This time varies depending on voltage level (low or high) and on possible network extension needs in order to accomplish the connection. The shortest deadline is five days for low voltage supplies that do not need network extension. Furthermore, in the case of consumers that have been previously disconnected due to fraud or non-payment, reconnection should be effective the day after the payment of the amount due.

For the next distribution regulatory period, new information requirements for reporting and monitoring 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.

Monitoring safeguard measures

The legal provisions set up by Act 3/2013 reinforced the competences of the Government in this regard and entitled CNMC to ensure the compliance of duties by owners and managers of the transmission network.

Throughout 2013, no safeguard measures were taken.

RES regulatory framework

Provided security and quality of supply requirements are met, producers subject to 'Special Regime' (i.e. renewable generators, excluding large hydro power plants, and cogeneration) had priority dispatch over 'Ordinary Regime' ones (conventional plants). Among 'Special Regime' producers, preference was given to *non-manageable renewables (i.e. wind or solar plants, as opposed to biomass o urban waste, which are deemed 'manageable*'). 'Special Regime' generators had to deliver binding day-ahead bids and programming and were responsible for their imbalances on even terms with 'Ordinary Regime' ones.

The new Electricity Act (24/2013) abolished the distinction between Special and Ordinary Regimes. Therefore these concepts disappear from the Spanish regulation. Renewables and cogeneration will participate in the market like any other technology, and complementary



revenue will be granted in order to compensate for the higher costs of those technologies. This complementary revenue will be computed in a way that allows an appropriate rate of return to a reference facility for each technology. According to the new Act, renewables keep priority access and priority dispatch (all market conditions being equal and subject to technical requirements for the safe operation of the system). Furthermore, in the new Act renewables remain responsible for their imbalances.

3.1.3 Network tariffs for connection and access

In Spain, the Government currently sets access tariffs to transmission and distribution electricity networks and CNMC issues an opinion by means of a non-binding report to the Government before each update or tariff revision. Afterwards, access tariffs are published in the Official Spanish Journal.

Although the Royal Decree-Law 20/2012, dated July 13th, established that access tariffs are to be reviewed on an annual basis, the financial situation of the electricity system in Spain (due to the existence of the electricity tariff deficit) made necessary an extraordinary revision of access tariffs in 2013, as set out in the Royal-Decree 9/2013, by which urgent measures to ensure the financial stability of the electricity system are established.

According to this legal provision, access tariffs were revised twice in 2013. The first revision was set according to Order IET/221/2013, dated February 14th, for the period from January 1st until July 31st 2014, and the second one, established by Order IET/1491/2013, dated August 1st, for rest of the year.

According to the Act 3/2013, CNMC is responsible of elaborating the methodology for the calculation of transmission and distribution network tariffs, in accordance with transparent, non-discriminatory and cost-reflective criteria.

The methodology for the calculation of transmission and distribution network tariffs is based on the efficient allocation of transmission and distribution costs to electricity consumers and producers.

Act 24/2013 of the Power Sector, modifies the access tariff system, and establishes a differentiation between access tariffs, aimed at recovering transmission and distribution costs (in line with the provisions of Directive 2009/72/EC), and those charges recovering the rest of regulated costs, such as subsidies to renewables and cogeneration.

Access tariffs to transmission and distribution networks paid by electricity consumers are different depending on voltage, power and periods of time while access tariffs paid by producers are based on energy circulated in transmission and distribution networks. These tariffs are unique throughout the entire Spanish territory.

In 2013 the access tariffs pay by electricity consumers were reviewed in July.



	Tp (€/kW y año)						Tp (€/kW y año) Te (€/kWh)					
Tarifa	Periodo 1	Periodo 2	Periodo 3	Periodo 4	Periodo 5	Periodo 6	Periodo 1	Periodo 2	Periodo 3	Periodo 4	Periodo 5	Periodo 6
2.0 A	31,649473						0,053255					
2.0 DHA	31,649473						0,074558	0,002663				
2.0 DHS	31,649473						0,074558	0,003728	0,001332			
2.1 A	39,978187						0,060781					
2.1 DHA	39,978187						0,079015	0,013979				
2.1 DHS	39,978187						0,079015	0,018872	0,006989			
3.0	39,688104	23,812861	15,875243				0,018283	0,012254	0,004551			
3.1	57,605223	35,523594	8,145965				0,013955	0,012416	0,007598			
6.1	38,102134	19,067559	13,954286	13,954286	13,954286	6,366846	0,025967	0,019393	0,010334	0,005143	0,003321	0,002080
6.2	21,550117	10,784384	7,892379	7,892379	7,892379	3,601014	0,015159	0,011321	0,006034	0,003002	0,001938	0,001213
6.3	18,396962	9,206443	6,737588	6,737588	6,737588	3,074123	0,014635	0,010929	0,005823	0,002897	0,001871	0,001173
6.4	13,320989	6,666262	4,878598	4,878598	4,878598	2,225932	0,008227	0,006825	0,003912	0,002221	0,001434	0,000989
6.5 C. Internac.	13,320989	6,666262	4,878598	4,878598	4,878598	2,225932	0,008227	0,006825	0,003912	0,002221	0,001434	0,000989

Table 4. Consumers access tariffs applied since 1st July 2013.Source: Order IET/1491/2013

Access tariff to transmission and distribution networks paid by electricity generators are 0.5 €/MWh.

CNMC is currently elaborating the methodology for transmission and distribution access tariffs and, after a first public consultation in June 2012, a revised version of the methodology was circulated in 2013 in order to receive the comments of stakeholders. The methodology is planned to be published in July 2014.

3.1.4 Cross-border issues

Access to cross-border infrastructure, including the procedures for the allocation of capacity and congestion management

Act 3/2013 set forth that CNMC will approve the methodologies establishing the terms and conditions for access to cross-border electricity infrastructures according to the criteria set forth by regulation. The Order IET/107/2014, which reviews the electricity access tariffs for 2014, abolished Order ITC/4112/2005, which regulated cross border exchanges (except its article 5). Accordingly, CNMC approved on 12th March 2014 the methodology establishing the terms and conditions for access to cross-border electricity infrastructures and the methodology for cross border balancing exchanges (Circular CNMC 2/2014).

This new framework facilitates 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. The methodology considers long term capacity allocation through a European platform, day-ahead market coupling and balancing exchanges (performed through the BALIT platform). Pursuant to this new framework, CNMC approves the rules for capacity allocation (in the previous framework, these rules were approved by the Ministry).



• French-Spanish interconnection (IFE)

While important increase in interconnection capacity across the Pyrenees will be accomplished in 2015, the commercial exchange capacity between Spain and France is still rather limited. The average commercial capacity in 2013 was 1.037 MW in the direction France to Spain and 897 MW in the direction Spain to France.



Figure 3. Exchange capacity and market matched energy between Spain and France in 2013 Source: CNMC

In the context of the South-West Europe (SWE) region of the ACER Electricity Regional Initiative, the following developments took place in the French-Spanish interconnection:

Long term capacity allocation: CRE and CNMC both approved the specific France-Spain auction rules (IFE rules version 3.1) in March 2014 in order to allocate monthly and annual capacity on the FR-ES interconnection (IFE) under the CASC platform. The first monthly auction of IFE in CASC was carried out successfully on 24th March 2014.

<u>Day-ahead capacity allocation</u>: The SWE market coupling project made good progress during 2013. The start-up solution was successfully launched on 4th February 2014, i.e. at the same time that the NWE coupling. This implied synchronised operations with NWE. On 13th May 2014, the SWE region launched the full coupling with NWE. This is a significant step towards an integrated European power market. The combined day-ahead markets of the NWE and SWE projects cover 17 European countries.

<u>Intraday capacity allocation</u>: In line with the interim target model, implicit continuous allocation will be implemented in the French-Spanish interconnection. This project is linked to progress in the NWE+ intraday project (so called XBID), where the Iberian PX participates.



• 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 2013 market splitting was applied almost 11% (i.e. 944 hours over 8,760 hours). It is worth mentioning that the export capacity in 2013 reached 2400 MW.

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

- <u>Day-ahead capacity allocation</u>: In line with the target model, day-ahead implicit allocation (market splitting) has been applied in the IPE since 2007. The Day-ahead Gate Closure Time was shifted to 12.00 CET in order to pave the way to the implementation of the European common algorithm (EUPHEMIA) and coupling with NWE. As mentioned in the previous section (about IFE), the start-up solution of SWE coupling was successfully launched on 4th February 2014 and on 13th May 2014, when the SWE region launched the full coupling with NWE.
- <u>Intraday capacity allocation</u>: Currently, there is market splitting mechanism on the basis of six intraday implicit auctions a day. There is a proposal by OMIE to combine intraday implicit continuous allocation with intraday implicit auctions in the MIBEL respecting the provisions of the NC CACM.
- Long term capacity allocation: Under the MIBEL Council of Regulators context, the Spanish and Portuguese NRAs (CNMC and ERSE respectively) agreed on the general regulatory framework of the coordinated mechanism for issuing FTRs option. The first joint auction of electricity interconnection capacity between Spain and Portugal took place on 25th March 2014.

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, until December 2013, a longterm financial transmission capacity product was auctioned twice a year. It consisted 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): CNMC COMISIÓN NACIONAL DE LOS MERCADOS Y LA COMPETENCIA

Auction	Date	Period	Successful bid price (€/MWh)	Contracts tendered by SES ⁵ (MW)	Contracts awarded to SES (MW)	Total contracts awarded (MW)
8 th	12 Dec. 2012	1st Half-year 2013	0.05	400	400	400
9 th	20 June 2013	2 nd Half-year 2013	0.00	400	35	162
10 th	17 Dec. 2013	1st Half-year 2014	0.00	400	53	105

Table 5. Results of the auctions forward contracts 2013 PT-ES. Source OMIE

The value of these contracts is rather modest as a consequence of the small differential price (null in the auctions during year 2013) observed between both zones.

Throughout 2013, the MIBEL Council of Regulators worked on the allocation rules for the implementation of a Regional Solution (FTR options) in a transitory phase, till integration of IPE in CASC (when CASC complies with all the requirements to issue FTRs).

On the Portuguese side, regulation was approved in December 2013 and an auction was held in that month under the coordinated rules. However, the products allocated in this first auction were only issued by the Portuguese system. The products auctioned in December were FTR options covering the 1st quarter of 2014. The amount of capacities auctioned were 200 MW in the PT->ES direction and 200 MW in the ES->PT direction.

On the Spanish side, on 17 March 2014 the Circular 2/2014 of CNMC, of 12 March, was published in the Spanish Official Journal, establishing the methodology for cross border infrastructure access, including the procedures for capacity allocation and congestion management, as well as the methodology for the provision of equilibrium services between systems managed by different System Operators. This Circular contains a specific Chapter II dedicated to the interconnection between Spain and Portugal which includes the principles of the coordinated mechanism for the long term management of this interconnection.

The first joint auction of electricity interconnection capacity between Spain and Portugal took place on 25 March 2014 under the coordinated mechanism established in the MIBEL Council of Regulators. This is the first European capacity allocation mechanism based in financial transmission rights (FTRs). The products allocated in this second auction were issued by both the Portuguese and Spanish systems. The products auctioned in March were FTR options covering the 2nd quarter of 2014. The amount of capacities auctioned were 300 MW in the PT->ES direction and 300 MW in the ES->PT direction. The primary issuers in the auction were the TSOs from Spain (REE) and Portugal (REN), each one with 50% of the total auctioned capacity in each interconnection flow (150 MW).

The net revenues – discounting the amounts derived from the settlement of the auctioned products – 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.





Cross-border balancing exchanges

The exchanges under the BALIT platform have been successfully extended to Portugal and Spain as from June 2014. Under this platform, bilateral TSO-TSO exchanges of balancing energy between neighboring systems (i.e. Portugal – Spain or Spain – France) are carried out.

Monitoring technical co-operation between Community and third-country TSOs

This monitoring has been incorporated as a new duty for CNMC by means of Act 3/2013. In this regard, CNMC monitors 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 system through the interconnection with the Spanish system.

CNMC COMISIÓN NACIONAL DE LOS MERCADOS Y LA COMPETENCIA



Figure 5. Exchange capacity and market matched energy between Spain and Morocco in 2013

Source: CNMC

Monitor TSO investment plans in view of TYNDP

This competence has been transposed by Act 3/2013. However, the Spanish NRA already monitored the investment plan of the TSO on a regular basis.

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 has been carried out in the framework of ACER.

The Royal Decree 1955/2000, regulating the activities of transmission, distribution, supply and authorisation procedures for electrical power plants, established in articles 8 to 16 the requirements for the development of transmission plans.

This Royal Decree has been complemented by the Act 24/2013, of the Power Sector, where the basics of electricity planning are regulated, incorporating tools to link the level of investment to the situation of the economic cycle, and the principles of economic sustainability. Annual investment limits are established in addition to the possibility of a special review of it from unexpected events affecting the efficiency, security and safety; as well as the necessary coordination of network planning with urban planning.

In addition, the Royal Decree 1047/2013, in its Articles 11 to 14, provides quantification and monitoring of these annual investment plans and their consistency with the National long term Plan.

Cooperation

Act 3/2013 has incorporated this duty as one of CNMC's objectives. CNMC 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 SWE region.

3.1.5 Compliance

Compliance of regulatory authorities with binding decisions of the Agency and the Commission

As already mentioned, the Royal Decree-Law 13/2012 obliges the Spanish NRA to comply with and put into practice those pertinent and binding decisions issued by ACER and the EC. Throughout 2013, there weren't any binding decisions issued by the EC or ACER towards the Spanish NRA.

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

CNMC ensures 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, the Act 24/2013 of the Power Sector 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) CNMC monitors the compliance with the certification requirements. As far as NC compliance is concerned, no electricity NCs have been formally adopted and published yet.

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

The duties contained in article 37(1)(i) and (j) of Electricity Directive have been transposed by the Act 3/2013. CNMC prepares a monthly report on wholesale (and retail) electricity market monitoring.

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 day-ahead spot market is coupled with Portugal since July 2007 and with the NWE region since 13th May 2014. 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 CNMC but whose nomination has to be notified to the Market Operator). During 2013 bilateral contracts represented 26% of the sold energy in the daily programme (PBF: Functioning Base Programme).

• Prices

In 2013, the weighted⁷ average spot market price was $57.69 \notin MWh$ (a little bit lower than previous year). The daily market price has represented in Spain 80% of the final price, the capacity payments a further 10%, and the solution to technical restrictions, the secondary regulation and other technical operation processes accounted for 9.6%.



Figure 6. Spanish electricity day-ahead spot market prices in 2013 (monthly average). Source: OMIE

• Transparency

Spot market prices (day-ahead and intraday) are published at OMIE website (<u>www.omie.es</u>) a few hours after the auctions are finished. Three months later, the bids, transactions and names of the suppliers are published. Therefore, the level of transparency of the spot market is quite high. Currently, the implementation of Regulation 543/2013 on submission and publication of data in electricity markets (and amending Annex I to Regulation (EC) No 714/2009 of the European Parliament and of the Council) is under development.

• Effectiveness of competition

Because of the legal compulsory nomination of every offer, the Iberian spot market is very liquid; it gathers 320 buyers and 1.072 sellers. A benchmarking of prices with those of other

⁷ Including different market sessions, plus balancing and reserves costs.



European spot markets shows that Spanish day-ahead market prices fall in the range of other European market prices.



Figure 7. European electricity day-ahead market prices in 2013

Source: European PX

The concentration of the electricity generation market decreased in 2012 and 2013 to a moderate level, below that of other European countries. However, it should be noted that the definition of the relevant market presents a certain degree of complexity: if we take the MIBEL as a reference and consider the fragmented ownership of the Special Regime, we obtain an HHI of approximately 1000 in 2013, whereas if we consider the domestic market, we obtain an HHI of 1300 (taking into account Special Regime offers clumped together by its different representatives). Moreover, if we use a more conservative definition that uses only the group of technologies setting the price in the Spanish market (combined cycle gas, coal, reservoir hydro), the HHI stands at 2300 in 2013. In particular, with regard to the latter, there is greater concentration compared to 2009, due to the decline in the share of the so-called 'OTHER' Ordinary Regime players from 4.4% to 2.3% in 2013, because of the decreased operation of their combined cycle gas plants.

As a result of this excess supply situation that has existed since 2009, no generator can be considered a pivotal supplier (the level of concentration and/or the pivotal nature of players are preliminary and approximate indicators of the degree of concentration, although they are neither required nor sufficient conditions to exercise market power in the electricity generation market, which requires a more detailed behaviour analysis for each case). However, there continues to be a difference between new entrants and incumbents in terms of the degree of vertical integration (the former sell most of their energy on the spot market, while the latter enter into bilateral contracts –mainly between companies of the same group– that were primarily associated with nuclear and hydro power plants in 2012).

The schedule resulting from the day-ahead market is increasingly further from the actual schedule that occurs at the end of the day, since the intraday market has grown in importance. This is the result of several factors that cause different technologies to resort to intraday



markets to complete their schedule. These factors include the introduction of the supply guarantee restrictions mechanism (RGS) in 2011, aimed at securing the usage of domestic coal, and the fact that there is a significant penetration of renewable energies on the market, whose operational capacity is determined by the availability of renewable resources that are intermittent and can only be forecasted with some precision with proximity to real time. This situation brings about the need for increased scheduling of balancing services, since they are bids based on *non-manageable technologies*.

The CNMC analyses these market participants' behaviour with a view to detect potential infringements of the market rules and/or competition law.

Balancing market

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

	2011	2012	2013
Endesa	31,4%	32,9%	34,2%
Iberdrola	27,4%	22,0%	25,0%
Gas Natural Fenosa	12,1%	17,7%	21,2%
EDP HidroCantábrico	21,4%	13,8%	8,3%
E.On Viesgo	4,3%	7,2%	6,0%
Others	3,4%	6,5%	5,3%

 Table 6. Secondary reserve (regulation capacity) market shares (years 2011-2012-2013)

 Source: CNMC, REE

	2011		2012		2013		
	Downwards Upwards		Downwards Upwards		Downwards	Upwards	
Endesa	30,6%	27,0%	21,2%	32,6%	28,5%	28,2%	
Iberdrola	21,5%	33,4%	24,7%	25,3%	38,5%	34,7%	
Gas Natural Fenosa	14,3%	22,2%	12,2%	21,5%	12,5%	22,9%	
EDP HidroCantábrico	6,8%	5,6%	6,6%	6,7%	4,9%	4,8%	
E.On Viesgo	13,1%	7,2%	11,5%	7,7%	11,0%	6,6%	
Others	13,7%	4,7%	23,7%	6,2%	4,5%	2,9%	

 Table 7. Tertiary reserve plus deviation management market shares (years 2011-2012-2013)

 Source: CNMC, REE

<u>REMIT</u>

Article 46.I of the Act of the Power Sector (Act 24/2013, of 26 December) allows the Ministry of Industry, Energy and Tourism, CNMC, 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.

Regarding the scope of Regulation (EU) No 1227/2011 on Wholesale Energy Market Integrity and Transparency ("REMIT"⁸), CNMC participates actively in the CEER and ACER Market Integrity and Transparency (MIT) Working Groups and related Task Forces⁹ to coordinate the implementation process.

In particular, Article 7 of the Act 3/2013 establishes the functions that the Spanish NRA shall carry out for supervising and controlling the proper functioning of the electricity and natural gas sectors. In this regard, CNMC will ensure compliance by the electricity and natural gas market participants of the provisions stated on in the European Union regulation, monitor the adequate price formation and supply conditions to end users, and guarantee the transparency and competition in the electricity sector and the gas sector. Article 27 (Inspection faculties) states that CNMC civil servant staff, duly authorized by the corresponding Director, will have the "authority agent" status and is empowered to perform inspections to enterprises for the right application of Act 3/2013. Article 29 (Sanctioning power) states that CNMC will exert its power regarding inspection and sanctioning according to the Electricity and Gas Laws. For the exercise of the sanctioning power, the due functional split between the instruction phase and

⁸ REMIT entered into force on 28 December 2011 and the prohibitions to market participants regarding insider trading and market manipulation, as well as the obligation to publish inside information, apply to both electricity and natural gas wholesale markets.

⁹ The CMIT WG has a Task Force called "Wholesale Energy Market" (WEM TF). The AMIT WG has three Task Forces called "Market Monitoring Governance" (MMG TF), "Wholesale Market Surveillance" (WMS TF), and "REMIT IT Management and Governance" (RITMG TF).





the resolution phase will be guaranteed. The instruction phase will correspond to the Energy staff, and the resolution phase will correspond to the Board.

On the other hand, the provisions related to inspection, infringements, and sanctioning regime in the electricity sector are developed in Title X of the Act 24/2013, of 26 December, of the Power Sector. In particular, Article 65.31 establishes an infringement consisting in market manipulation (also in attempted phase), insider trading or not publishing inside information, according to REMIT. The sanctioning faculty corresponds to CNMC.

In addition to the market monitoring tasks performed by CNMC, market oversight reports with aggregated data and no commercially sensitive information covering both spot and derivatives markets are published.

The duty contained in article 37(1)(u) of the Directive 2009/72/EC 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 are the data submitted by REE to be published at ENTSO-E Transparency Platform website (www.entsoe.net).

The OTC market

The OTC traded volumes in 2013 (328.5 TWh) increased 32.4% compared to 2012 (248.1 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 2013) Source: CNMC with data from brokers

• 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 have 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 II and MiFIR¹⁰ and the Securities Market Law¹¹, and thus of the Spanish Securities Markets 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 CNMC. In this sense, the Directive 2009/72/EC 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.

In the scope of the cooperation between regulatory agencies, the so-called REMIT EU Regulation states explicitly as necessary in its Recital 29 that "national regulatory authorities, competent financial authorities of the Member States and, where appropriate, 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 CNMC has limited information over OTC power transactions (volumes and transaction prices, through the information voluntarily submitted by the main brokers), by means of the Collaboration Agreement between the Spanish NRA and the Spanish Securities Market Commission (CNMV), signed on 3 July 2012, CNMC can ask CNMV about OTC transactions regarding the supervision of CESUR auctions and wholesale energy markets in the context of investigations into potential market abuses¹².

CNMC 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.

¹⁰ Pending publish at DOUE.

¹¹ Law 24/1988.

¹² This was possible by the Sustainable Economy Act, whose 5th final disposition modified the Securities Market Law, enabling the information exchange between CNMV and the entities composing the MIBEL Regulatory Council.



• Transparency and effectiveness of competition

CNMC publishes monthly supervisory reports of the electricity forward markets in Spain with aggregated data from all the existing forward market mechanisms and trading venues (i.e. CESUR auctions¹³, OTC market, the futures market managed by OMIP, and the cleared volumes in the existing clearing houses OMIClear and BME Clearing).

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).

According to REMIT Implementing Acts, the NRAs will have access to transactions, including orders to trade, to be submitted by the market participants, as well as financial data, the latter by means of the MoU ACER-ESMA¹⁴. This will allow CNMC to perform an integrated supervision.

The new regulatory framework allows CNMC to have access to more information and therefore, to be able to analyse and detect anticompetitive behaviours.

The power futures market managed by OMIP

In the context of the MIBEL Regulatory Council, Spanish NRA supervised the futures market managed by OMIP¹⁵, in co-ordination with the other members of the MIBEL Regulatory Council. Such a market started on 3rd 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 futures market managed by OMIP during year 2013 amounted to 40.88 TWh, higher than in the previous year (32.82 TWh in 2012)¹⁶. The OTC volumes cleared and settled by OMIP clearing house (OMIClear) increased also in 2013 (38.36 TWh) compared to 2012 (28.27 TWh).

¹³ The last CESUR auction took place on 19 December 2013, as explained below in the section devoted to CESUR auctions.

¹⁴ MoU ACER-ESMA concerning the consultation and cooperation regarding their regulatory responsibilities in relation to EU wholesale energy markets, signed on 18 July 2013.

¹⁵ Operador do Mercado Ibérico de Energia SGMR, S.A. (Iberian Energy Market Operator, Portuguese side).

¹⁶ Additionally, 5.69 TWh were traded through OMIP auction mode for selling special regime production in Portugal. In particular, on 21 March, 19 June, 18 September and 12 December 2013, the 6th, 7th, 8th, and 9th 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.


Figure 9 shows the trading evolution (in terms of energy traded) in the MIBEL 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 OMIClear¹⁷ (OMIP clearing house, central counterparty and managing entity of the settlement system).

Additionally, another clearing house (BME Clearing) is active since 21 March 2011 for OTC clearing of Iberian power derivatives. The accumulated volume during year 2013 reckons 33.48 TWh (monthly average of 2.79 TWh). This clearing house has experienced a remarkable growth compared to the previous year (in year 2012, the accumulated volume was 8.55 TWh, i.e. a monthly average of 0.71 TWh).



Figure 9. Evolution of accumulated traded volumes per year in OMIP auctions and continuous market, and OTC volumes registered in OMIP and BME Clearing (TWh) 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 2013. 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 in part to the strong renewable penetration which is not easily predictable in future/forward contracts. The annual average price for the spot price in 2013 (44.26 €/MWh) is lower than the annual average prices for the futures contracts (49.18 €/MWh for the prompt month contract, 49.74 €/MWh for the prompt quarter

¹⁷ Sociedade de Compensação de Mercados de Energia, S.G.C.C.C., S.A.



contract and 49.61 €/MWh for the prompt year contract). The futures contracts showing larger volatility in Figure 10 are the monthly contracts, fluctuating between 36.55 €/MWh (in March) and 63.75 €/MWh (in December).



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 2013. Source: OMIE and OMIP-OMIClear

• Transparency

The following sources provide information regarding post-trade transparency. They 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, FTR auction related to the Portugal-Spain electricity interconnection, etc.).
- Historical aggregated data per contract regarding settlement prices, cleared volumes and open interest by BME Clearing.





• Effectiveness of competition

According to the power futures market operator¹⁸ and its clearing house, in year 2013 a new yearly record was produced in screen trading volume, number of trades (an increase of 42% on a year to year basis), and cleared volume (86 TWh in year 2013, a 29% increase on a year to year basis). Four market makers – Citigroup, Axpo Iberia, Nexus Energía and JP Morgan – assumed this role during 2013. During 2013, 15 new members (13 Trading Members, 2 Clearing Members and 1 OTC Broker) joined the Market. At the end of year 2013, there were 47 trading members in the power futures market. Additionally, 5 brokers intermediated for the registration of OTC trades in OMIClear.

Supply of Last Resort Auctions (CESUR Auctions)

From 1 July 2009 until 31 December 2013, the default supply became entirely provided by last resort suppliers, in accordance with Royal Decree 485/2009 of 3rd April, which regulates the implementation of the supply of last resort in the electricity market.

The Order ITC/400/2007 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 regulated CESUR auctions whose resulting price was used as a reference for setting the last resort tariff.

The Royal Decree 302/2011 established a compulsory purchase mechanism for the last resort suppliers and compulsory sale mechanism for the special regimes facilities¹⁹ of products with price differences settlement between CESUR prices and the spot prices.

The products purchased by the last resort suppliers in the CESUR auctions were standard quarterly forward contracts (base load and peak products) also traded in the forward markets. In this sense, there was 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).

The 25th CESUR auction took place on 19th December 2013. A three-month base load product and a three-month peak product were offered at this auction for the first quarter of 2014, being the auction price, 61.83 €/MWh and 67.99 €/MWh, respectively. On 20th December 2013,

¹⁸ OMIP-OMIClear press release, Highlights 2013, Lisbon, 20 January 2014: <u>www.omip.pt/LinkClick.aspx?fileticket=fu_D3Ey2hGw%3d&tabid=100&mid=781&language=es-ES</u>

¹⁹ Facilities choosing option a) in the article 24.1 of Royal Decree 661/2007 (*feed-in tariff* option).



CNMC did not validate the results of the 25th CESUR auction²⁰, given the atypical circumstances in which the auction was held.

The equilibrium prices of the CESUR auctions were traditionally used to calculate the energy cost component in the last resort tariff. As a remedy for the absence of valid reference prices for such an ex-ante calculation (CESUR auction), the article 1 of the Royal Decree Law 17/2013, determining the price of electricity in contracts subject to "Voluntary Price for Small Consumer" (PVPC) in the first quarter of 2014, set the base load and peak prices for calculating the energy costs to be included in PVPC. This Royal Decree considered the base and peak settlement prices of the Iberian Energy Derivatives Exchange (OMIP) for delivery in Q1-14 registered from 1st July 2013 to 24th December 2013. In particular, the reference prices finally obtained for the calculation of the energy cost component were 48.48 €/MWh (base load) and 56.27 €/MWh (peak), respectively. However, the difference between these prices and the resulting spot prices for the delivery period Q1-14 will be translated to the end-user bills as a discount in the next invoices. This difference amounted to approximately 23 €/MWh (the exact number depends on the modality of supply: single price across the day versus two or three pricing periods).

Later, the Royal Decree 216/2014 sets out the method for calculating voluntary prices for the small consumer of electrical energy and its legal framework. It came into effect by 1st April 2014. The mechanism for calculating the price, which is determined in that Royal Decree, changes from fixing in advance the energy cost component through the CESUR auctions, into a mechanism in which the consumer will pay for the energy consumed in the invoicing period valued at the spot price in such a period. Alternatively, the end-user can choose a fixed price for a twelve months period offered by the reference supplier.

• Prices

As indicated before, the price formation in the CESUR auctions was 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 2013 (in the 25th CESUR auction on 19th December 2013, CNMC did not validate the results, as indicated above):

²⁰ According to article 6 of Order ITC/1601/2010, of 11 June, regulating CESUR auctions referred in Order ITC/1659/2009, of 22 June, and according to article 14.1 of Order ITC/1659/2009.



Auction date	22 th CESUR auction 20 March 2013		23 th CESUR auction 25 June 2013		24 th CESUR auction 24 September 2013	
	Q2-13	Q2-13	Q3-13	Q3-13	Q4-13	Q4-13
Auctioned products	Base load	Peak	Base load	Peak	Base load	Peak
Participants	3	1	3	3	3	7
Winners	2	4	30		30	
Rounds	2	2	18		12	
Target volume (MW)	2.500	380	2.500	572	2.500	352
Starting price (€/MWh)	62	68	62	69	62	68
Auction price (€/MWh)	45.41	51.95	47.95	55.21	47.58	57.00

Table 8. Results of CESUR auctions in 2013Source: auction administrator and CNMC

In the ex post supervisory framework of the CESUR auctions, CNMC monitored 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.

• Transparency

These auctions were managed by OMEL Mercados (one of OMIE's subsidiary companies). The conditions for participating and the results were published in its website. Therefore, all the interested market participants had access to the same public information, and they were invited by the auction administrator to diverse informational meetings, auction tests, and can provide comments to the draft auction rules.

The following CESUR Auctions results were 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

CNMC has the authority to supervise the auction development in real-time, ensuring that auctions are competitive and according to the established rules.

Monitoring the occurrence of restrictive contractual practices

The Royal Decree-Law 13/2012 reinforced this duty. As a consequence, CNMC is entitled to analyse specific cases following a complaint of the affected party. Furthermore, CNMC can address this issue on its own initiative as competition authority.

Respecting contractual freedom with regard to interruptible supply contracts and with regard to long-term contracts

Act 3/2013 has incorporated this duty as one of CNMC's functions. CNMC 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 on a voluntary basis by some consumers called "interruptible demand". The revenue regime for this service was revised in 2012 by Order IET/2804/2012, of 27th December, furthermore, according to Order IET/2013/2013, of 31st October the remuneration of the interruptibility service is determined through an auction. This revision took place considering the low demand and high penetration of renewable generation.

3.2.2 Retail market

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.

Royal Decree 1718/2012 modified the procedure for the reading and billing of electricity households below 15 kW. According to this Royal Decree, from 1st April 2013 onwards electricity households and small companies (up to 15 kW contracted power) received their electricity bill every two months together with the readings unless they have smart metering. Billing should be based on real reading and issued by the last resort supplier (provided that they are supplied in the last resort supply system). However, subject to the previous agreement among the consumer, the supplier and the reader, billing could be issued monthly. In that case, billing was based on estimated consumption.

Those consumers with smart metering would be able to receive monthly billing by the supplier. From April 1st 2013, electricity companies informed their clients about this change of billing, attaching a letter to the first three bills issued according to the new procedure.

The Act 24/2013 of the Power Sector and the Royal Decree 216/2014 modified the regime of the last resort supply and introduced the so called "voluntary price for small consumers" (known by the acronym in Spanish: PVPC) for consumers below 10 kW. As from 1st January 2014, the last resort regulated tariff for small consumers disappears. Instead, small consumers can opt to be supplied at the voluntary price for small consumers. According to this new regulation, as from 1st April 2014, last resort tariffs are only available to the following types of consumers in the following terms: i) vulnerable consumers, in this case, the last resort tariff will be 25% lower than the PVPC; and ii) consumers that not having the right to be supplied under the regime of voluntary price for small consumers, do not have a free market supply contract in force, in this case, the last resort tariff will be 20% higher than the PVPC.



The mentioned Royal Decree establishes the methodology for calculating the voluntary price for small consumers. These prices include the energy cost (ex post basis, price resulting in the spot market during the period), the applicable access tariffs and other charges. The "reference suppliers" have the obligation to apply these prices to the small consumers below 10 kW that wish to be supplied at PVPC. Additionally, the reference suppliers must offer to this kind of consumers a (not regulated) fix price for one year. The idea is that some consumers may wish to have an ex ante fix price instead of an ex post variable price. However, any consumer can opt to be supplied by a free supplier with a free price.

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

As mentioned in 3.2.1.1, the duties contained in article 37(1)(i) and (j) of Electricity Directive have been incorporated as functions of CNMC by Act 3/2013.

• Prices

At retail level, CNMC monitors retail prices through the commercial offers that are published in CNMC's price comparison tool and through the "Circular" CNE 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 CNMC's retail electricity market report which is published every six months.

Besides the ex-officio monitoring performed by CNMC, the monitoring of level of prices, level of transparency, level and effectiveness of market opening and competition can also be executed following a complaint from a customer on an ad-hoc basis.

For small consumers, the prices of the last resort tariff were the following throughout 2013:

	Without hourly dis	crimination	
	Capacity term €/kW a year	Energy term €/kWh	Average price c€/kWh
Q1:	21,893189	0,150938	18,623
Q2:	21,893189	0,138658	18,146
Q3: July	21,893189	0,140728	10.000
Q3: August – September	35,649473	0,124985	18,923
Q4	35,649473	0,130485	19,533
2013			18,799

Table 9. Yearly average and quarterly prices of last resort tariff without hourly discrimination in 2013.Source: own elaboration



	With ho			
	Capacity term	Energ €/k		
	€/kW a year	Period 1	Period 2	Average price c€/kWh
Q1:	21,893189	0,183228	0,063770	11,017
Q2:	21,893189	0,167658	0,057190	11,473
Q3: July	21,893189	0,172148	0,059420	10 1 10
Q3: August – September	35,649473	0,150108	0,058633	13,142
Q4	35,649473	0,158548	0,055833	11,595
2013				11,646

Table 10. Yearly average and quarterly prices of last resort tariff with hourly discrimination.Source: own elaboration.

	With hourly discrimination, three periods				
	Capacity term	Energy term €/kWh			
	€/kW a year	Period 1	Period 2	Period 3	Average price c€/kWh
Q1:	21,893189	0,184298	0,077720	0,052775	n.a
Q2:	21,893189	0,167558	0,069460	0,049695	n.a
Q3: July	21,893189	0,171878	0,069250	0,050915	
Q3: August – September	35,649473	0,149838	0,068148	0,050522	n.a
Q4	35,649473	0,159148	0,070678	0,046932	n.a
2013					

Table 11. Yearly average and quarterly prices of last resort tariff with hourly discrimination (three periods).Source: own elaboration.

• Transparency

CNMC price comparison tool aims to improve the transparency of retail markets. In this webbased price comparison tool, suppliers' public commercial offers for low voltage consumers are disclosed. More recently, CNMC has incorporated in its website a new tool²¹ to allow consumers checking the accuracy of the electricity bills of those supplies under the PVPC mechanism based on the consumption registered in a given period of time.

The duty contained in article 37(1)(u) of Electricity Directive has been transposed in the Spanish legislation. CNMC has been granted the power to impose all reasonable measures necessary to

²¹ <u>http://facturaluz.cnmc.es/</u>



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).

• Effectiveness of competition

The Act 3/2013 granted CNMC the power to supervise the degree of competition in the energy markets at wholesale and retail level. CNMC publishes 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, CNMC published a report supervising the development of competition in the electricity and gas markets (period 2009-2012 and preview 2013) following the recommendations of CEER regarding the assessment of at least the four dimensions of retail markets: the degree of customer satisfaction, market outcomes (prices, margins, etc.), market structure, and services offered by distributors (either as market facilitators, in terms of being in charge of processes for switching, disconnections and new connections, or as guarantors of the continuity and quality of the electricity supply).

During 2013, following the path in previous initiated in previous years, the degree of concentration of the retail market continued its slightly decreasing tendency shown in the past.

At the end of 2013, and based on the information provided by the five biggest Spanish electricity 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 40% and 37%, respectively. Concerning the free market, Endesa is still the first supplier in terms of supplied energy with a share of 34%, though Iberdrola has increased its base of customers, surpassing 5.1 million (48% of customers in the free market) by December 2013. In general, the market shares of free suppliers not belonging to the same group of the distribution network tend to increase. In terms of energy, the overall share of free market suppliers belonging to the group of the distribution network in 2013 was 49%, while one year earlier it was 51%.

Also, in 2013 CNMC monitored the "Supplier Switching Office" (OCSUM) activities whose main target is to facilitate the process for switching supplier. CNMC has developed a very active role in monitoring OCSUM and ensuring that OCSUM properly addresses these issues in their working groups. As the existing regulation does not fully establish the operational aspects and formats for the communication flows that should take place between retailers and distributors, the OCSUM working groups agreed on those flows.

The Act 24/2013 of the Power Sector in its third transitional provision establishes that OCSUM will continue to perform the duties until June 30, 2014, date from which will be carried out by CNMC.

The Act 24/2013 introduced a general timeframe of 21 days for the switching process in electricity. According to this new piece of legislation, future specific regulations will establish the switching mechanisms and conditions to bill the supplies. This law establishes as well the final closure account following any change of electricity no later than 42 days after the change has



taken place. Furthermore, the Royal Decree 216/2014 establishes that when interventions in the user's facilities are not needed, the consumer may request the switching process to be completed within 15 days, when the meter is read or by a specific date chosen by the consumer.

During 2013, around 2.1 million consumers abandoned the last resort supply (taking into account data collected from the five major Spanish distribution companies) in favour of the free market. In 2013, the switching rate increased with respect 2012, reaching almost 13% mainly due to the increase in free market switches, as previous years.

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

As shown in the table below, the evolution of the switching rate during the last three years has followed an increased trend, reaching 13.0% in 2013, the number of failed switches maintains the trend initiated in 2012.

ELECTRICITY SWITCHING DATA 2009 – 2013*						
2009 2010 2011 2012 2013						
Residential switching rate	4.39%	6,61%	10.04%	11.63%	12,57%	
Non residential customers	26,280,450	26,555,315	26,645,921	26,740,386	26,844,788	
Total switching rate	5.23%	7.42%	10,61%	12.07%	12.97%	
No. all customers 27113,874 27,406,461 27,505,927 27,593,863 27,684,1						
% failed switches	8.79%	8.20%	5.98%	5.48%	5.31%	

Table 12. Electricity Switching 2009-2013 Source: OCSUM.

* The calculated switching rates reflect the number of realized switches as a percentage of customer number during the analysed 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"*.

On 30th May 2013, the Spanish NRA approved the Resolutions by which the lists of main and dominant operators in the energy sectors are established and made public. First, the NRA declared and published the list of the five companies with major market shares (the so called *"main operators"*) in the electric sector²² (ENDESA, S.A., IBERDROLA, S.A., GAS NATURAL SDG, S.A., HIDROELECTRICA DEL CANTABRICO, S.A and E.ONESPAÑA, 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 DEL CANTABRICO).

²² The reference market for the electricity dominant operators is MIBEL (Spain and Portugal).

Monitoring the occurrence of restrictive contractual practices

The Royal Decree-Law 13/2012 reinforced this duty. As a consequence, CNMC is entitled to analyse specific cases following a complaint of the affected party. Furthermore, CNMC can address this issue on its own initiative as competition authority, as performed in the past executing the sanctioning powers against utilities for switching supplier without the consumers' explicit consent or for abuse of dominant position (i.e. DSOs restricting suppliers' access to the consumers consumption data).

<u>Respecting contractual freedom with regard to interruptible supply contracts and with regard to</u> <u>long-term contracts</u>

Act 3/2013 has incorporated this duty as one of CNMC's functions. CNMC intervenes after the receipt of 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

Recommendations on supply prices

CNMC has the power to issue recommendations on supply prices according to Act 3/2013. In 2013, the only recommendation on this topic was the proposal to the Government for calculating the energy price to be considered in the last resort tariff corresponding to the 1st quarter 2014, following the invalidation of the 25th CESUR auction in December 2013.

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".

As explained at the beginning of section 3.2.2, as from 1st April 2014, the system of end-user regulated tariffs has changed. The Royal Decree 216/2014 establishes the methodology for calculating the so called "voluntary price for small consumers", which reflects spot market prices during the consumption period and includes the applicable access tariffs and other charges. The "reference suppliers" have the obligation to apply these end-user prices. For more information on public service obligations, see chapter 5.

Report on investigations carried out, main results and possible measures adopted

CNMC launched in May 2014 an investigation on electricity suppliers, in particular on communication campaigns to consumers and advertisements related with the PVPC's new framework. Furthermore, as mentioned above, CNMC carried out investigations on non-compliance with obligations to grant access to consumption database; supplier switching without consumer consent; and other infringements of consumer protection rules.

Report on tariff deficit if it exists

Since 2000, the revenues in the Spanish Electricity System have not been sufficient to cover system's costs. Accordingly, a subsequent deficit has arisen (the "Tariff Deficit").

The origin of the electricity tariff deficit, the evolution of access cost and tariffs and the financial mechanisms are detailed in the National Report 2012.

It's estimated that up to the 31st of December 2013, the electricity system will fall into a debt totalling EUR 25.2 billion. 77.6% of this amount (EUR 22.3 bn) belongs to FADE and is guaranteed by the Kingdom of Spain. The 12.5% remaining belongs between the electricity companies (9.9%) and others creditors (13%).

Regarding the measures taken in 2013 to solve the problem of the electricity tariff deficit, it is important to remark that the Government has undertaken an integral reform of the Electricity System in Spain, with the aim of correcting the electricity tariff deficit and guaranteeing electricity supply at the lowest possible price for the consumer.

In detail, the electricity reform aims at the following objectives:

- 1. Ensure the sustainability of the electricity system:
 - <u>Sufficiency</u>: Electricity System's revenues are to be sufficient to fully cover Electricity System's costs, keeping a reasonable profitability for past investments.
 - <u>Financial stability</u>: an automatic revision of Electricity System's revenues is introduced to avoid new imbalances, meaning that every regulatory measure with the effect of increasing costs or reducing revenues should include additional measures that guarantee the Electricity System's economic and financial equilibrium. For this purpose, the Government will establish a forecast of costs and revenues for the next six years annually.
- 2. Correct the existing imbalance between the electricity costs and revenues:

The remuneration of regulated costs is reviewed and a new mechanism for the remuneration of the following activities is established:

- Transmission and distribution:
 - Compensation of network activities is established according to objective, transparent and regularly revised audited standards.
 - An adequate compensation is guaranteed for investments, based on the Government's Treasury Bonds for 10 years plus 200 basic points (currently equal to 6,5%).
 - Additional incentives are foreseen to increase grid availability, improve the quality of supply and reduce network losses.



- Predictability is assured as the maximum investment will be known in advance for a 6 year period.
- Renewable, cogeneration and waste:
 - Renewable and cogeneration technologies receive a fix payment to cover investment costs not recovered through market sales. Market sale's risk is reduced through a cap and floor mechanism.
 - Compensation is set up according to investment and operational standard costs per technology and year of startup. These standards are objective, transparent and regularly revised.
 - A reasonable return on the standard investment is based on Government's Treasury Bonds for 10 years plus a 300 basic points spread (currently 7,5%). Facilities beating the standard through efficiency or cost savings will get an additional return.
 - Specific incentives are set up for renewables in Canary Islands and Baleares, as these technologies are less expensive than existing conventional fossil fuel.
- 3. Reduce the cost of electricity generation:
 - <u>Capacity payments</u> (mainly received by combined cycle plants) are reduced:
 - o Investment incentive: from 26.000€/MW 10 years to 10.000 €/MW 20 years.
 - Availability incentive: a new methodology is established to incentivize the availability of flexible generation when the system is in need of back up of renewable energy.
 - The mechanism is compatible with the ACER an EC criteria for capacity mechanisms.
 - Possibility of mothballing of combined-gas power plants under strict criteria ensuring security of supply (the system has a large excess capacity).
 - Interruptible service: a market mechanism is introduced to select the providers and the compensation for instant interruptibility services is reduced, in a context of excess capacity, and it is based on an auction system.
- 4. Inform and protect electricity consumers:
 - The former last-resort tariffs for consumers are replaced by a market-based Voluntary Price to Small Consumers.
 - Electricity prices for vulnerable consumers: The so called "bono social" will be limited to consumers satisfying some social and economic conditions. The "bono social" is determined as the difference between the Voluntary Price to Small Consumers and a



baseline value, which is now called Last Resort Tariff. The reference suppliers will include this discount in the bills of vulnerable consumers.

- The switching process between power supply companies is facilitated.
- An arbitration mechanism for the resolution of consumer disputes is strengthened, according to European Directives.

3.3 Security of supply (if and insofar as NRA is competent authority)

Implementation of safeguard measures

No safeguard measures had to be taken throughout 2013.

3.3.1 Monitoring balance of supply and demand

Monitoring of security of supply

CNMC 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 2017).

The electricity consumption on the Spanish peninsular system was 246,166 TWh in 2013, 2.3% lower than in 2012. Discounting the effects of temperature and labour patterns, the annual decrease was 2.1%, compared to a decrease of 2.0% registered in 2012.

The evolution of overall annual growth of consumption, from 2009 to 2013, is shown below:



Figure 11. Rolling annual consumption growth in % (green: non-adjusted; blue: labour-and-temperature adjusted)

Source: REE

The yearly maximum for hourly average demand and daily energy consumption were reached on 27th February with 39.96 GW and 23th January with 808 GWh respectively. These values were 10.95% and 10.92% lower than historical maximums registered in 2007.



Installed capacity in generating facilities on the peninsular system showed a net growth of 556 MW during 2013, reaching a total of 102.28 GW, representing an increase of 0.4% compared to the previous year. The large majority of this increase comes from the new renewable facilities, mainly Solar Thermoelectric (300 MW) and solar photovoltaic (140 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 national system (mainland and extra-peninsular) in 2013.



Figure 12. Installed generation capacity in the Spanish national system at the end of 2013 Source: REE

Tecnology/Generation capacity (MW)	2012	2013
CCGT (Combined Cycle)	27,194	27,206
Fuel+gas (conventional)	3,429	3,498
Coal	11,758	11,641
Nuclear	7,853	7,866
Hydraulic (large)	17,762	17,766
Wind power	22,722	22,900
Solar	6,538	6,981
Other Special Regime	10,360	10,290
TOTAL	107,616	108,148

 Table 13. Installed generation capacity structure in the Spanish national electricity system

 Source: REE



In 2013, total demand of power generation (including mainland and extra-peninsular demand) decreased around 2% down to 260,870 GWh, which was covered as follows:

Balance of Spanish electric energy system	Energy 2012 (GWh)	Energy 2013 (GWh)
Hydraulic	19,455	34,205
Nuclear	61,470	56,378
Coal	57,662	42,384
Fuel+gas (conventional)	7,541	6,981
Gas (Combined Cycle)	42,510	28,983
Special Regime	103,172	111,679
International Exchanges	-11,200	-6,958
Consumption in generation	-8,739	-7,012
Consumpotion in pumping	-5,023	-5,769
Total demand	266,849	260,870

Table 14. Balance of the Spanish electricity system.Source: REE

3.3.2 Monitoring investment in generation capacities in relation to SoS

Duties and powers of the regulatory authority

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 RESbased or CHP):

	Connected		Disconnected		
	Туре	MW	Type M		
Meirama	Coal	17			
San Esteban II			Hydraulic	2	
TOTAL		17		2	

Table 15. Changes in generation facilities under 'ordinary regime' commissioned in 2013.Source: REE.



Operational network security

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

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

Investment in interconnection capacity for the next 5 years or more

• 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.

This project has now all the administrative authorisations needed for it to begin. Work started at the end of 2011, with entry into service by 2015. A complementary line in Spanish territory between Santa Llogaia and Bescanó has been selected as a PCI (Project of Common Interest) in the context of the TEN-E 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 selected as a PCI too. Furthermore, this project is mentioned as a key project for security of supply in the EC communication "European Energy Security Strategy" published on 28th May 2014.

• Interconnection with Portugal

The cross border capacity between Portugal and Spain reached 2.400 MW in 2012 and 2.700 MW in May 2014. The objective of reaching a commercial exchange capacity equivalent to 3.000 MW with Portugal is getting closer. The interconnection project between Northern Portugal and Spain has been selected as a PCI.



More complementary projects will be completed in the coming years.

• Interconnection with the Balearic Islands

The power interconnection HVDC-250 kV between mainland Spain and the Balearic Islands started to operate on the 14 of August 2012. It involves a high voltage submarine interconnection composed of three cables (one return cable) 237 km in length. In 2013 this cable has transmitted 22% of total demand of the Balearic islands (1.3 TWh).

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 CNMC issues annually, for the period 2013-2017 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 2014-2017 are as follows:

	Electricity consumption (TWh)			
	Central High			
Year	Scenario	Scenario		
2014	251			
2015	252	252		
2016	256	256		
2017	258	262		

Table 16. Expected evolution of consumption (TWh) for the Spanish Mainland in the period 2014-2017.Source: CNMC and REE.

Peak demand	Winter		Peak demand	Sum	mer
(MW)	Lower Scenario	High Scenario	(MW)	Lower Scenario	High Scenario
2014/15	41,420	45,000	2014	38,944	40,700
2015/16	41,739	45,500	2015	39,129	40,700
2016/17	42,469	46,000	2016	39,674	41,200
2017/18	43,212	47,000	2017	40,122	42,200

Table 17. Expected Peak Demand (MW) for the Spanish Mainland in the period 2014-2017.Source: Promoters, CNMC 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"²³ 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 <u>available</u> capacity does not match expected <u>installed</u> 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.

Capacity (MW)					
Winter	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Large Hydro	8,647	8,821	9,336	9,347	9,349
Nuclear	5,684	6,690	6,690	6,690	6,690
Coal	9,247	9,247	9,020	8,305	8,304
Fuel/gas	506	506	0	0	0
CCGT	21,756	21,763	21,763	21,763	21,763
Special Regime Renewable	3,771	3,771	3,771	3,771	3,771
Special Regime NO Renewable	4,767	4,767	4,767	4,767	4,767
Balance Exchange Peak	-1,850	-1,850	0	0	0
TOTAL	52,528	53,715	55,347	54,644	54,644

Capacity (MW)				
Summer	2014	2015	2016	2017
Large Hydro	7,161	7,335	7,849	7,858
Nuclear	5,590	5,590	5,590	5,590
Coal	9,864	9,864	8,922	8,921
Fuel/gas	506	0	0	0
CCGT	20,152	20,115	20,115	20,115
Special Regime Renewable	6,672	6,672	6,672	6,672
Special Regime NO Renewable	4,767	4,767	4,767	4,767
Balance Exchange Peak	-1,200	0	0	0
TOTAL	53,513	54,344	53,916	53,924

 Table 18. Expected firm available capacity installed in winter and summer (period 2014-2017)

 Source: Promoters, REE and CNMC.

As it can be seen in the table below, no capacity constraints are expected in the period 2014-201. All Coverage Demand Index are above 1.2 in the central demand scenario.

²³ 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.

Reserve margin rate - winter	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Lower demand scenario	1.27	1.30	1.33	1.29	1.26
High demand scenario	1.17	1.19	1.22	1.19	1.16
Reserve margin rate - summer	2014	2015	2016	2017	
Lower demand scenario	1.37	1.39	1.36	1.34	
High demand scenario	1.31	1.34	1.31	1.28	

Table 19. Expected reserve margin rate in winter and summer. Period 2014-2018.Source: Promoters, REE and CNMC.

The above Coverage Demand Index are calculated without taking into account the effect of the interruptibility of demand, but today this service seems guaranteed at least the first two years; if it were considered, this Index would increase.

3.3.3 Measures to cover peak demand or shortfalls of suppliers

Monitoring of security of supply

In case some demand has to be curtailed, there is a service provided by some consumers called "interruptible demand". In 2013, 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 2013 by Order IET/2013/2013, of 31st October. This regime was reviewed in the context of other measures included in the electricity sector reform, which addressed the various activities and cost items of the electricity system, with the aim to ensure the sustainability between revenues and costs.



4 The gas market

4.1 Network regulation

4.1.1 Unbundling

Designation and certification of transmission system operators

Act 3/2013 sets forth that CNMC will be in charge of the certifications procedure as foreseen by the Gas 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.

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

ENAGAS shareholders	% total shareholding
Oman Oil Holdings Spain	5.00
Kartera 1 (Kutxa Bank)	5.00
SEPI	5.00
Free Float	85.00

Table 20. 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 staff had to sign a code of conduct to guarantee its independence from all other activities.

However, Act 12/2011 modified the Hydrocarbons Act and required ENAGAS to transfer the operation of the transmission system and the current 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 its 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 Act 12/2011. Concretely ENAGAS approved the project of segregation of the company in two new companies, namely, ENAGAS TRANSPORT, S.A.U. and ENAGAS GTS, S.A.U. The first one is in charge 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 established that the independent system operator shall keep separate accounts for every managed company, specifying those revenues and expenses attributable to the mentioned management.

TSO certification

Regarding the main TSO, ENAGAS, requested the certification as a Transmission System Operator on 4th November 2011. The Board of the Spanish NRA, in its meeting dated 19th April 2012, issued a preliminary certification decision of ENAGAS according to article 63 bis of Hydrocarbons Act (Act 34/1998, of October 7th), amended by Royal Decree-Law 13/2012. Pursuant to the mentioned article 63 bis, the NRA 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. The NRA 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 was also notified to the EC.

In its meeting dated 18th April 2013, the Board of the NRA monitored the compliance of the conditions set in the definitive certification decision, resolving that ENAGAS had adopted the measures needed to fulfil the unbundling requirements. This decision adopted 18th April 2013 was also 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, the Spanish NRA, in its meeting held on 13th December 2012, stated that the issue of the certification had to be rejected unless Reganosa adopted 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 the NRA in its meeting dated 4th April 2013, issued its final decision rejecting the certification under the ownership unbundling model. Once adopted the proposed measures to comply with unbundling requirements, Reganosa requested again the certification under the Ownership unbundling model on 27th June 2013. After having issued the CNMC preliminary decision and the CE favourable opinion, the Board of CNMC issued its final decision on 4th February 2014. The definitive certification has been notified to the EC.
- Enagás Transporte, S.A.U submitted an application to be certified as Independent System Operator (ISO) for primary gas transport trunk networks owned by Saggas and by ETN on 21st May 2013. The Board of the Spanish NRA in its meetings dated 18th July and 31st July 2013 respectively, issued the preliminary certification decisions of ENAGAS Transporte S.A.U and proceeded to notify them to the European Commission. After CE favourable opinions, the Board of CNMC issued its final decision on 14th and 26th November 2013, respectively, for Enagás Transporte S.A.U as ISO for primary gas transport trunk networks owned by Saggas and by ETN respectively. The definitive certifications have been notified to the EC.

Regarding certification revisions, CNMC will monitor the fulfilment of the unbundling requirements and will ensure that TSOs and DSOs 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 regarding legal, functional and accounting unbundling requirements. Act 12/2007 amended article 63 of the Hydrocarbons Act to adapt it to articles 9 and 13 of Gas Directive 2003/55. This article establishes the legal and functional unbundling requirements applicable to all regulated activities including distribution and transport.



The Royal Decree-Law 13/2012 amended again the article 63 of the Hydrocarbon Act 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 create confusion in their communication and branding in respect of the separate identity of the supply branch of the vertically integrated undertaking.

In execution of its general powers, the NRA approved on 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.

The above mentioned report concluded that the distribution system operators had already established their compliance programme. So, undertakings had 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 Act 3/2013 has introduced an explicit and clear function for CNMC consisting of monitoring 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, CNMC is drafting its first formal report on the supervision of DSO unbundling, in execution of the aforementioned explicit function. Hence, CNMC 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 the current unbundling regulatory framework for natural gas and the legal, functional and accounting unbundling requirements for DSO.



In this regard, 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 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 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 the NRA 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 the Spanish NRA and to the Ministry. The process is monitored by the NRA.

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, staff and share holdings in order to comply with unbundling requirements.
- The modification of the job functions of some staff, and those 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:
 - \circ $\;$ revision of procedures of access to that information,



- o introduction of confidentiality clauses in contracts with third parties,
- o 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 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 CNMC, 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 CNMC receive, by virtue of Order ITC/1548/2009, regular accounting and economic-financial information from stakeholders. The Order establishes that the information shall 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, CNMC has been assigned the function of verifying the effective unbundling of accounts.

4.1.2 Technical functioning

Balancing services

According to Act 3/2013, the NRA is in charge of approving the methodology regarding the provision of balancing services

Currently, the balancing regime is set by 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.

The new balancing regime (market base balancing), according to the European balancing network code, is expected to be implemented in Spain by October 2016.

Security and reliability standards, quality of service and supply

The compensation payments to customers in case of interruptions of gas supply are established at article 66 of Royal Decree 1434/2002, and range from 10% to 50% of the monthly access tariffs gas bill, depending on the duration of the interruption.

Time taken to connect

CNMC has been assigned the function of monitoring the time to connect and repair.

The Royal Decree 1434/2002 established the deadline to respond a customer request of connection when major works are needed. The distribution company has 6 days when no specific project is needed and 15 days when such a kind of project is required.

The detailed estimated price offer for a new gas connection is provided in 6 or 15 days. In the case of connection below 4 bar, the payment is established by regulation depending on the meters needed the connections and the consumption of the new customer. If the connection is above 4 bar, then a budget is provided.

As far as no major work is required, the Royal Decree 1434/2002 sets that once the supply request is received (from the supplier of the customer), the DSOs has a maximum deadline of six working days to start the delivery of gas (connections with minor works).

Connections with minor works include only the checking of the documentation (if needed), installing the gas meter, checking the security of the gas installation by the DSO and start the delivery of gas. The DSO connection tariff is set by the regulation and it is billed by the supplier.





Monitoring access to storage

According to article 7 of Act 3/2013, the NRA monitors the access to storage. The access model to underground storage is fully regulated-TPA.

The Order ITC/3862/2007, the Order ITC/3128/2011 and the Order IET/849/2012 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:

- Firstly, the capacity is allocated to the supplying companies in proportion to their final sales in the previous year (up to 20 days of average gas demand) in order to comply with the strategic reserves imposed by law.
- The remaining capacity is allocated through an auction mechanism.
- In case there is still capacity left, it is allocated according to the agents capacity requests communicated to the System Technical Manager²⁴ under "first-come-first-served" criteria.

The general rules of the auction procedure are established by Resolution of 14 March 2008, 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. CNMC is the supervisory body for these auctions and the Spanish power exchange (Operador del Mercado Ibérico de Energía, Polo Español, S.A. -OMEL)²⁵ is the institution responsible for organising them.

The following table summarises the results of the auctions held in 2009, 2010, 2011, 2012 and 2013.

²⁵ Through its subsidiary OMEL Diversificación S.A.U. from year 2009.

²⁵ Through its subsidiary OMEL Diversificación S.A.U. from year 2009.





	Auction for the allocation of underground storage capacity of natural gas					
Туре	Multi-round ascending-price, electronic mechanism					
Date	30 March 2009	25 March 2010	29 March 2011	27 March 2012	26 March 2013	
Allocated capacity (GWh)	4,257	7,397	8,874	3,822	960	
	1 April 2009 -	1 April 2010 -	1 April 2011 -	1 April 2012 -	1 April 2013 -	
Supply period	31 March 2010	31 March 2011	31 March 2012	31 March 2013	31 March 2014	
Capacity price (TPA rate added)	6.603 €/GWh per vear	3.932 €/GWh per vear	832 €/GWh per vear	4.932 €/GWh per vear	4.932 €/GWh per vea	

Table 21. Auctions for underground storage of natural gas: results of auctions between 2009 and 2013Source: Auction administrator and the Spanish NRA

Monitoring safeguard measures

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 emergency situations shall be those cases where due to circumstances that are out of control of one or all agents intervening in the gas system, there is a risk of shortage or scarcity of supply 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 2013, there was no need to take any of these safeguard measures.

4.1.3 Network and LNG tariffs for connection and access

In 2013, the Government approved access tariffs for natural gas (previously, the NRA issues a non-binding report) and published them in the Official Spanish Journal. 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.

The Order IET/2812/2012 established access tariffs of natural gas for 2013.

According to the Act 3/2013, CNMC is responsible for elaborating the methodology for the calculation of access tariffs for transmission and distribution, regasification, storage and tank truck fill-up, in accordance with transparent, non-discriminatory and cost-reflective criteria.

CNMC is currently developing the methodologies to calculate access tariffs for transport and distribution, regasification, storage and tank truck fill-up. The first step consists of the publication of a public hearing document, with the objective of receiving comments from the stakeholders on the different alternatives to establish the natural gas access tariffs. Afterwards, CNMC will submit a drafted proposal of the methodology to the stakeholder's consideration before the approval.



After having launched a public consultation, in November 2013 CNMC circulated a proposal of the aforementioned methodology for the final consideration of stakeholders, as a final step before the definite approval of such methodology.

Prevention of cross-subsidies

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

CNMC 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 quarterly report on the incomes, costs, assets and liabilities that relate to each activity. The Spanish NRA uses this information to supervise that there are no subsidies between regulated and liberalised activities. In addition, CNMC analyses the financial and economic health of companies operating in the electricity and gas sectors.

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

Regulated and negotiated access to storage

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

4.1.4 Cross-border issues

Access to cross-border infrastructure including allocation and congestion management

CNMC is in charge of approving 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 (Act 34/1998) and its implementing regulation. This methodology will be developed according to the European network codes on capacity allocation and congestion management.

Cross border cooperation

CNMC, in cooperation with other regulators, is working in a number of areas according to the priorities defined in the Work Plan 2011-2014 for the South Gas Regional Initiative (SGRI). It is remarkable the significant progress reached in 2013 regarding capacity allocation mechanisms and congestion management procedures.



The European regulation has been transposed in Spain, France and Portugal resulting in a set of harmonized rules for capacity allocation in all borders. In this regard, CNMC approved the Circular 1/2013, dated 18th December 2013, establishing congestion management procedures (CMP) to be applied at international connections by pipeline with Europe and the Circular 1/2014, dated 12th February, establishing capacity allocation mechanisms (CAM) to be applied at international connections by pipeline with Europe.

In the context of the early implementation of the CAM NC, and in accordance with the capacity products definition and calendar defined in the roadmap for capacity allocation mechanisms of SGRI, last 3th March 2014 was successfully held the first coordinated auction of yearly products.

There were simultaneously auctioned yearly products in all virtual interconnection points included in the South Region using the European platform PRISMA. In the next months, it is envisaged to introduce gradually different auctions for the different time horizons products in decreasing order until getting day-ahead and daily products in 2015. These auctions are considered to be a crucial step towards the completion of the gas internal market.

Cooperation

CNMC, in cooperation with ACER, NRAs and European Commission, is working on promoting 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.

Concretely, moreover the progress on CAM early implementation, it is also remarkable the progress made by SGRI on issues such as increase interconnection capacity with the rest of Europe, improve interoperability between systems, increase transparency, implementation of the Directive and development of gas hubs.

Regarding the gas hub development, since 2010 the Spanish NRA is working for developing the gas hub, among other, revamping existing regulation, particularly the part dealing with pipeline access contracts, assessing the modifications in the logistic model and the models for the integration and development of an Iberian gas hub.

Monitoring investment plans and assessment of consistency with Community wide network development plan

CNMC monitors investment plans of the transmission system operators, particularly regarding the consistency with the Community-wide network development. Such assessment may include recommendations to amend those investment plans.

In 2013, in base of the current duties, the Spanish NRA participated in the energy planning procedure of network investment by means of the Gas Planning Procedure which is responsibility of the Government and counts on the participation of the Autonomous



Communities, the Technical System Operator, transmission and distribution system operators and other actors, as well as CNMC.

4.1.5 Compliance

Compliance of regulatory authorities with binding decisions of the Agency and the Commission

The Spanish NRA has to comply with and put into practice those pertinent and binding decisions issued by ACER and the EC.

Throughout 2013, there weren't any binding decisions issued by the EC or ACER towards the Spanish NRA.

<u>Compliance of transmission and distribution companies, system owners and natural gas</u> <u>undertakings with relevant Community legislation, including cross-border issues</u>

CNMC ensures compliance of transmission and distribution system operators and, where relevant, system owners, as well as of any gas undertakings with the relevant Community legislation, including cross-border issues.

According to the Act 3/2013, the NRA monitors the implementation of rules relating to the roles and responsibilities of transmission system operators, distribution system operators, suppliers and customers. The results are included in an annual report on its activity and the fulfilment of its duties.

Imposing penalties

In accordance with the Act 3/2013, the NRA has powers to impose penalties on natural gas undertakings not complying with their obligations.

Power to ask any information from gas undertakings

CNMC has powers to request any information from gas undertakings.

In this regard, CNMC shall issue the so-called "Circulars" that must be published in the Official State Journal, 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.

CNMC may also request some information from an agent, in order to carry out a specific investigation procedure. If the agent does not comply with this request, CNMC shall carry out and solve disciplinary proceedings.

Power to carry out investigations and impose measures to promote competition

CNMC is entitled 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; CNMC has the power to carry out investigations and to impose legally binding decisions.

In 2013, CNMC has made a binding decision regarding the information that gas DSOs have to provide to customers when connecting new customers to the gas grid. The information includes the customer's right to choice any gas supplier.

4.2 **Promoting Competition**

According to the Act 3/2013, CNMC is in charge of monitoring the level of prices, the level of transparency, the level and effectiveness of market opening and competition at the Spanish gas markets.

4.2.1 Wholesale markets

CNMC prepares a monthly report on wholesale gas market monitoring.

In Spain there is no organised gas hub for the time being. In order to provide a price reference for gas in Spain, CNMC has developed an index of natural gas border prices, out of gas imports data, which are available at CNMC website²⁶ based on the data provided by Customs of the Spanish Tax Agency (AEAT).

The following figure shows the evolution of natural gas prices from January 2002 to December 2013 at the border (according to this index), including LNG and natural gas introduced to Spain through pipelines from Morocco, Algeria and France.

²⁶ http://www.cnmc.es/es-es/energ%C3%ADa/hidrocarburosgaseosos/mercadomayorista.aspx





Figure 13. Evolution of natural gas border prices in Spain (€/MWh) (Jan 2002 - Dec 2013) Source: AEAT and CNMC

As shown in the figure above, prices reached their peak values in 2008, when prices rose sharply up to $29,37 \notin$ /MWh in December 2008. In 2013, natural gas border price has remained in the band of 25-27,5 €/MWh. The prices from July 2009 to December 2013 have risen up a 88% from 14,03 up to 26,39 €/MWh.

The table below shows the monthly evolution of these prices in 2013 (in €/MWh):

(€/MWh)	Natural gas (pipeline)	LNG	Average import price	
Jan 2013	27,59	25,91	26,69	
Feb 2013	28,11	25,03	26,61	
Mar 2013	27,69	25,08	26,40	
Apr 2013	28,36	26,45	27,45	
May 2013	28,57	25,60	27,29	
Jun 2013	27,57	26,58	27,06	
Jul 2013	26,35	25,92	26,12	
Aug 2013	26,35	25,48	25,90	
Sep 2013	24,94	25,40	25,20	
Oct 2013	26,08	24,43	25,06	
Nov 2013	26,73	25,17	26,04	
Dec 2013	26,83	25,87	26,39	

Table 22. Natural gas border prices in Spain, 2013. Source: AEAT and CNMC



a) Spanish OTC gas market (MS-ATR Platform)

Most of the 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 43 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).



Figure 14. Balancing and trading points. Source: CNMC.





Figure 15. Spanish OTC gas market v. consumption 2013 (GWh/month) Source: ENAGAS and CNMC

Liquidity lies almost completely on the LNG terminals, which accounted for 65,5% of all OTC trade in 2013. Barcelona LNG terminal was the main trading point with 17,7% of gas trade. The AOC, which could look like an attractive virtual trading point, increased its operations since last year when it drew 33,7% of OTC trade.

Balancing point	Traded gas 2013 (TWh)	Production (TWh)	Churn rate	Number of active traders	Market share of 3 main traders
Barcelona LNG Terminal	70.868	40.223	1,8	22	60%
Huelva LNG Terminal	62.718	26.133	2,4	18	52%
Bilbao LNG Terminal	49.776	29.076	1,7	13	65%
Cartagena LNG Terminal	26.593	15.806	1,7	11	94%
Mugardos LNG Terminal	22.287	15.610	1,4	14	68%
Sagunto LNG Terminal	29.578	16.528	1,8	11	79%
Total LNG	261.820	143.376	1,8	26	51%
Underground storage	3.145			15	74%
Transmission balancing point	134.546	190.045	0,7	37	42%
Total Spain	399.511	333.421	1,2	43	46%

Table 23. Main features – OTC Source: ENAGAS


Transactions in the Spanish OTC market in 2013 represented globally 1,20 times natural gas demand.

Next figures show the monthly evolution of gas traded and of the number of transactions – almost 67.000 – registered in the Spanish OTC market in 2013.



Figure 16. Gas traded in the OTC market during 2013 Source: ENAGAS



Figure 17. Gas transactions in the OTC market in 2013 (nº Transactions/month) Source: ENAGAS



The figure below shows the market sharing-out in the OTC gas market for 2013 in terms of purchased energy. The highest shares belong to Unión Fenosa with 20,9% and Gas Natural Comercializadora with 14,9%. UNIÓN FENOSA GAS is a company jointly controlled by GAS NATURAL and ENI, each with a 50% stake, which in 2011 supplied 13.1% to the market. The Resolution of the CNC, of 11 February 2009, allowed GAS NATURAL to takeover UNIÓN FENOSA subject to certain conditions, including a commitment to keep UNIÓN FENOSA GAS as an independent company in the sale of gas to third parties.



Figure 18. Market share (purchases) in the OTC market in 2013 Source: ENAGAS and CNMC

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 hub in Spain

In April 2010, the Spanish NRA 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 of the Spanish Market are good 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 to create, 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 2014, the creation of a gas hub has received a new impetus. The Ministry of Industry has created a new working group in order to analyse and discuss the regulatory measures needed to remove all the regulatory barriers to develop this hub in January 2015.

c) Auctions to buy operational gas for TSOs

The Order IET/2812/2012, which lays down the transit charges associated with access by third parties to gas facilities and remuneration of the regulated activities, established that TSOs 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, 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. CNMC is the supervisory body of these auctions and the Spanish power exchange (Operador del Mercado Ibérico de Energía, Polo Español, S.A. -OMEL)²⁷ is the institution responsible for organising them.

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, 2012 and 2013.

²⁷ Through its subsidiary OMEL Diversificación S.A.U. from 2009.



	Auction for the acquisition of natural gas for own consumption (operating gas) and for the minimum filling level of gas pipelines of the transport network and regasification plants					
Туре		Multi-round desc	ending-price, electroni	c mechanism		
Date	28 May 2009	25 May 2010	24 May 2011	29 May 2012	28 May 2013	
GWh operating gas	1 259.2	1 518.6	1 504.9	1 961.2	1 927.5	
GWh min. filling level	356.8	416.6 89.4 59.9 23.2				
GWh total	1,616.0	1,935.2 1,594.2 2,021.14 1,950				
Supply period	1 July 2009 -	1 July 2010 -	1 July 2011 -	1 July 2012 -	1 July 2013 -	
Supply pendu	30 June 2010	30 June 2011	30 June 2012	30 June 2013	30 June 2014	
Auction price	14.65 €/MWh	19.37 €/MWh	26.16 €/MWh	32.31 €/MWh	34.85 €/MWh	

Table 24. Auctions for operating and minimum filling level gas²⁸: results of the auctions held in 2009-2013Source: auction administrator and CNMC

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, regulated 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 have to be celebrated each year for the "base load gas" product and one for the "winter gas" product^{29.}

The products subject to auction during year 2013 were: (i) the base load gas at a preestablished monthly amount for the period 1 July 2013 - 31 December 2013 and for the period 1 January 2014 – 30 June 2014; and (ii) the winter gas for pre-established monthly amounts for the period November 2013 - March 2014.

A multiple-round descending-clock price mechanism was used for the two auctions celebrated during year 2013, and their results were the followings:

²⁸ In the auctions of years 2011, 2012 and 2013 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.

²⁹ According to article 5.4 of Order ITC/1660/2009 establishing the calculation methodology for the Last Resort Tariff of natural gas, by means of the redaction given by Order ITC/1506/2010.



	Auction for the acquisition of natural gas for the last resort tariff			
Туре	Multi-round descending price, electronic mechanism			
Date	18 June 2013	29 October 2013		
Monthly base load gas (GWh)	1 500 GWh (250 GWh/month)	1 500 GWh (250 GWh/month)		
Wollting base load gas (GWII)	for second half of year 2013	for first half of year 2014		
Winter gas (GWh)	2 370 GWh	not opplicable		
willer gas (Gwil)	(November 2013 - March 2014)	not applicable		
Supply period	1 July 2013 -	30 June 2014		
Auction price for base load gas	31.28 €/MWh	30.99 €/MWh		
Auction price for winter gas	32.55 €/MWh	not applicable		

 Table 25. Auctions for natural gas for last resort supply: results of the auctions held in 2013³⁰

 Source: Auction administrator and CNMC

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

On 14 May 2013 the second 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, taking into account the amendments from Resolution SEE of 7 May 2013.
- Resolution of the General Directorate of Energy Policy and Mining (DGPEM) of 3 April 2013, establishing the operational rules for the development of the auction for the purchase for the period 1 June to 31 October 2013 of the natural gas needed to fill the minimum level of the basic underground storages "Yela" and "Castor". The maximum amount to be auctioned was fixed in 10,042 GWh (29% for Yela and 71% for Castor).

The total matched amount was 2,174 GWh, allocated between the 7 winners. The deliveries were arranged in two periods of two and a half months: the first period from 1 June 2013 to 15 August 2013, and the second period from 16 August 2013 to 31 October 2013. These electronic auctions are arranged according to the sealed-bid method and, in particular, they employ the "pay-as-bid" mechanism, i.e. there is not a single equilibrium price.

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

Effectiveness of competition

The Spanish NRA develops its monitoring functions of market opening and competition in wholesale and retail markets by periodic reports (monthly reports for wholesale markets and

³⁰ In the auction held on 18 June 2013, the matched quantities were 50% and 40% of the base load and winter gas, respectively, of the auctioned amounts shown in Table 5.



quarterly reports for retail markets). Additionally, CNMC has the legal duty of ensure that the switching procedure fulfils with the regulation and procedures in force.

DSOs and suppliers are mandatory requested to submit information to CNMC about gas distributed and supply contracts (consumption and prices) broken down by geographical areas and levels of pressure and consumption.

Also, the Spanish NRA 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 reference price for gas in Spain, the Spanish NRA 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, as explained above, CNMC is currently working on the development of a gas hub which is expected to be in operation by January 2015. The wholesale gas market has come to a standstill as a result of structural aspects like the unchanging nature of the main supplier's market share, the lack of an organised market with transparent prices, and the still-pending development of the balancing rules of the system based on market mechanisms.

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.

CNMC has also the mandate to ensure contractual freedom with regard to interruptible supply contracts as well as long-term contracts provided that they are compatible with EU law.

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.

Finally, it should be noted that the supervisory competences for CNMC are aligned with the REMIT provisions.



4.2.2 Retail market

CNMC publishes quarterly monitoring reports on gas retail market.

Retail market structure

In 2013, natural gas consumption in Spain reached 332 TWh (8,15 % lower than in 2012).

In December 2013, the total number of gas consumers was 7.470.174 (+72.161 consumers with regard to December 2012).

The figure below shows the share of supplies in the Spanish market in 2013 by company, in terms of energy volume:



Figure 19. Share of natural gas supplies by company (in energy volume) Source: CNMC

In terms of number of customers, the sharing-out of supplies at 31 December 2013 is showed in the next figure:

CNMC COMISIÓN NACIONAL DE LOS MERCADOS Y LA COMPETENCIA



Figure 20. Share of natural gas supplies by company (in energy volume) Source: CNMC

The natural gas consumption by end-use sectors in 2013 was as follows:



Figure 21. Consumption of natural gas by sectors (2013). Source: Sedigas

The evolution of this segmentation shows a very remarkable decrease in the share of gas dedicated to electricity generation, reaching a percentage of 17% in 2013 from a 40% in year 2009. During the last five years, there has been a decrease in the use of gas in electricity generation due to the reduction in consumption due to the crisis and the increase of production with renewable energies and with coal.





Figure 22. Natural gas sales in Spain (GWh). Source: Sedigas

Since July 2008, regulated tariffs for end-users (last resort tariff) 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 last resort tariff.

By 31 December 2013, the number of consumers supplied at a free price was 5.339.742 (72,26% of all consumers), while the number of consumers supplied at the last resort tariffs was 2.072.432 (27,74% of the consumers). In volume, consumers supplied at last resort tariff represent only 3,4% of the Spanish gas market.



Figure 23. Consumers at the Last Resort Tariff vs consumers at free market price Source: CNMC



The following table shows the 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:

Consumption groups (Pressure range and annual consumption)	MWh	Number of Consumers (31 Dec 2013)
Group 1 (Pressure >60 bar)		
1.1: Consumption <= 200 GWh/year.	1.097.685	24
1.2: Consumption > 200 GWh/year <= 1.000 GWh/year.	17.045.038	37
1.3: Consumption > 1.000 de GWh/year.	90.673.541	42
TOTAL Group 1	108.816.264	103
Group 2 (Pressure >4 bar and =< 60 bar)		
2.1: Consumption <= 500.000 KWh/year.	228.480	713
2.2: Consumption > 500.000 KWh/year <= 5 GWh/year.	2.669.606	1.318
2.3: Consumption > 5 GWh/year <= 30 GWh/year.	13.380.309	986
2.4: Consumption > 30 GWh/year <= 100 GWh/year.	21.134.767	418
2.5: Consumption > 100 GWh/year <= 500 GWh/year.	54.697.036	260
2.6: Consumption > 500 GWh/year.	44.112.258	38
TOTAL Group 2	136.222.457	3.733
Group 2 BIS (Pressure =< 4 bar)		
2.1 bis: Consumption <= 500.000 KWh/year.	44	0
2.2 bis: Consumption > 500.000 KWh/year <= 5 GWh/year.	708.024	349
2.3 bis: Consumption > 5 GWh/year <= 30 GWh/year.	470.877	69
2.4 bis: Consumption > 30 GWh/year <= 100 GWh/year.	0	0
2.5 bis: Consumption > 100 GWh/year <= 500 GWh/year.	0	0
2.6 bis: Consumption > 500 GWh/year.	43.675	0
TOTAL Group 2 BIS	1.222.619	418
Group 3 (Pressure =<4 bar)		
3.1: Consumption <= 5.000 kWh/year	9.423.676	4.117.549
3.2: Consumption > 5.000 kWh/year <= 50.000 kWh/year.	31.405.459	3.279.452
3.3: Consumption > 50.000 kWh/year <= 100.000 kWh/year.	1.466.195	23.340
3.4: Consumption > 100.000 kWh/year hasta 1 GWh.	14.291.902	43.998
3.5: Consumption > 8 GWh/year.(night consumption)	9.258.053	853
TOTAL Group 3	65.845.285	7.465.192
Group 4 (Interrumpible)		
(Pressure > 60 bar)		
4.1.Consumption <= 200 GWh/year.		
4.2.Consumption ia 200 GWh/year.<= 1000 GWh/year.	256.953	1
4.3:Consumption > 1000 GWh/year.	1.730.063	2
(Pressure >4 bar and =< 60 bar)		
4.4.Consumption <= 30 GWh/year.	25.995	
4.5.Consumption > 30 GWh/year <= 100 GWh/year.		
4.6:Consumption > 100 GWh/year <= 500 GWh/year.		
4.7: Consumption > 500 GWh/year.		
TOTAL Group 4	2.013.011	3
Non-energetic use (raw material)	6.248.452	2
LNG satellite plant for a single consumer	11.706.385	723
TOTAL GENERAL	332.074.474	7.470.174

Table 26. Natural gas consumption and number of consumers in 2013Source: CNMC



Evolution of gas market shares

At the end of 2013, there were 70 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:



Figure 24. Spanish retail gas market. Sharing-out in terms of energy Source: CNMC

Retail prices

At retail level, CNMC monitors retail prices through the commercial offers that are published in the CNMC's price comparison tool.

There is an obligation for the suppliers to communicate to CNMC 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.





Figure 25. Spanish retail gas market. "Spread" between maximum and minimum offer without for different natural gas -household and commercial- consumers (June, 2013) Source: CNMC

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

Level and effectiveness of market opening and competition

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

The Act 24/2013, in its third transitional provision, establishes that OCSUM will continue performing its duties until June 30, 2014, date from which will be carried out by CNMC.

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 (on the 1st, 11st and 21st day of each month) 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 (Act 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.

The 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 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, CNMC 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 CNMC'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 CNMC, the Central Government and the Regional Governments.

Switching rate

The table below shows the evolution of the switching rate during the last four years. It is remarkable that 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 2010-2013						
2010 2011 2012 2013						
Residential switching rate	ntial switching rate 11,73% 19,04% 18,67% 12,6					
Number of residential customers	7.111.612	7.207.431	7.323.988	7.396.840		
Total switching rate 11,62% 18,86% 18,48% 12,519						
№ all customers 7.180.367 7.278.501 7.398.013 7.						

Table 27. Gas switching data 2010-2013 Source: CNMC



The Switching Procedure, agreed by DSOs and retailers, can be seen in detail in the following web: <u>http://ocsum.es/index.php/doc/procedimientos/gas-natural</u>

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

CNMC has the function of monitoring the adequacy of prices and the terms and conditions of supply to customers in accordance to the Law and making recommendations on adequacy of supply prices to public service obligations and to consumer protection.

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 Chapter 5.

Duties and powers of the regulatory authority

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

The Spanish legislation includes provisions and tools to avoid market abuse. The National Competition Commission (CNMC) 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. In this regard, CNMC has adopted legally binding decisions on lack of consumers consent in supplier switching and non-compliance with consumer protection rules.

The NRA adopts information by-laws, which will have to be published in the Spanish Official Journal, 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.

On 30th May 2013, the Spanish NRA approved the Resolutions by which the lists of main and dominant operators in the energy sectors are established and made public. First, the NRA declared and published the list of the five companies with major market shares (the so called *"main operators"*) in the electric sector³¹ (ENDESA, S.A., IBERDROLA, S.A., GAS NATURAL SDG, S.A., HIDROELECTRICA DEL CANTABRICO, S.A and E.ONESPAÑA, 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 DEL CANTABRICO).

³¹ The reference market for the electricity dominant operators is MIBEL (Spain and Portugal).



There is also a list for fuels and liquefied petroleum gas (LPG)³².

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 30th May 2013, the Spanish NRA 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.

Tariff deficit

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 imbalances between revenues and costs. 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 metering stations; and (iii) modifications to the remuneration of underground storage areas.

The Order IET/2812/2012, dated on 27th December, established an increase in access tariffs of natural gas of 1% for 2013 with respect to the previous year. In 2013, total revenues amounted to 2.879 million euros while total regulated costs amounted to 3.205 million euros in that year, and then, a tariff deficit of 326 million euros has arisen. Such tariff deficit may be mainly explained by the reduction in the demand for natural gas in Spain in 2013.

4.3 Security of supply (if and insofar as NRA is competent authority)

Monitoring on security of supply (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 1st report outlining the findings resulting from the monitoring of security of supply, according with article 5 of Directive 2009/73/EC, available here:

³² On May 30th 2013, the Spanish NRA Administration Board approved the list of main operators in the energy sector which was published in the Official Journal on July 10th 2013.

http://www.minetur.gob.es/energia/gas/legislacion/2012/470_resolucion_informe_seguridad_su ministro_gas.pdf

Additionally, CNMC 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 333.421 GWh, 8,0% lower than 2012 mainly due to the decrease of demand for electricity generation.

The conventional demand for natural gas decreased by 0.5% in 2013.

There has been a reduction of 32,8% 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 decrease in coal prices in the European markets, 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 next table shows the evolution of gas demand in the Spanish market in 2013.

	2012 (GWh)	2013 (GWh)	Annual variation (%)
Demand of gas (except power generation)	278.008	276.608	-0,5%
Demand of gas for power generation	84.600	56.813	-32,8%
Total demand in Spain	362.608	333.421	-8,0%

Table 28. Gas demand in Spain in 2013 vs 2012. Source: ENAGAS

Procurement of gas supplies. Origin and mix of gas imports

The domestic production of Spanish fields is marginal and reaches only 500 GWh, 0,2% of Spanish gas demand in 2013. 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 2013 Spain received natural gas from a total of eleven different countries.





The figure below shows the mix of gas supplies to the Spanish system in 2013:

Figure 26. Sources of gas imported to Spain in 2013. Source: CNMC

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:

	2012 (GWh)	2013 (GWh)	Annual variation (%)
Pipeline	158.284	202.049	27,6%
LNG	237.736	173.901	-26,9%
Total	396.020	375.950	-5,1%

Table 29. Gas imports in Spain 2013 vs 2012. Source: ENAGAS



	2013 (GWh)	% of imported gas
Pipeline	202.049	53,7%
LNG	173.901	46,3%
Total	375.950	100%

Table 30. Gas imports in Spain 2013. Source: ENAGAS

LNG high presence provides the Spanish system with a high level of flexibility, favouring the access to new upstream gas sources. LNG is also functions as back-up for renewable sources.

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 renewable sources.

CNMC's demand forecast for the period 2014-2017 in Spain is detailed in the following table:

Gas Demand (TWh)	2013 (real)	2014	2015	2016	2017
Gas demand (except power generation)	276	284	291	296	301
Gas demand for power generation	57	57	58	59	59
Total gas demand in Spain	333	341	349	355	360

Table 31. Forecast of annual gas demand 2014-2017.Source: CNMC. Efficiency Scenario

Import capacity

Six LNG import terminals are operational in the Spanish gas system.

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 23,3% in average for these plants, varying from 12% (the minimum, at Cartagena), to 37% (maximum, at Mugardos).



Figure 27. Use rate of LNG terminals in 2013 Source: ENAGAS

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

LNG Terminal	LNG storage capacity (m ³)	Send-out capacity (m ³ (n)/h)
Barcelona	760.000	1.950.000
Huelva	619.500	1.350.000
Cartagena	587.000	1.350.000
Bilbao	300.000	800.000
Sagunto	600.000	1.000.000
Mugardos	300.000	413.000
TOTAL	3.166.500	6.863.000

Table 32. Capacity of LNG terminals at Dec, 31 2013. 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 interconnection with Algeria (Medgaz) is operational since April 2011. Its initial capacity is 8 bcm/year,

In April 2013, there was an increase in the gas pipeline capacity through Larrau, reaching an import/export capacity of 165 GWh/day.

Pipeline connection	Capacity (GWh/day)
Larrau (ES->FR)	165
Larrau (FR->ES)	165
Irún (ES->FR)	5 (Winter) / 9 (Summer)
Irún (FR->ES)	0 (Winter) / 10 (Summer)
Tarifa (MO->ES)	444
Almería (AL->ES)	266
Badajoz (ES->PT)	134
Badajoz (PT->ES)	35 (Winter) / 70 (Summer)
Tuy (ES->PT)	30 (Winter) / 40 (Summer)
Tuy (PT->ES)	25

The current capacities of international interconnections are the following:

Table 33. Interconnection physical capacities at Dec, 31 2013.Source: ENAGAS

c) Booked and available capacity

At the end of 2013 there was available capacity in all LNG terminals. Booked TPA capacity at LNG terminals was 32% throughout the year. Available capacity ranges from a minimum mean value of 15% in Cartagena up to 52% in Bilbao.

In the pipeline interconnections, there was available capacity with Portugal in both ways The two interconnections with Portugal (Tuy and Badajoz) are booked thought a single virtual interconnection point.

In the Maghreb pipeline, importing gas from Algeria through Morocco, the capacity was booked in 75% throughout the year. In Medgaz pipeline, capacity book was 83%.

There wasn't free capacity at the connection with France through Larrau, with 100% of average import capacity booked during 2013. Moreover, the Irún-Biriatou connection had also 100% of



average capacity booked in the direction from France to Spain, though its capacity is much smaller than Larrau.

The following table shows the situation at all these pipelines interconnections, in terms of average rates of booked and available capacity during 2013:

Entry (or exit) point		Contracted capacity in 2013 (%)	Available capacity in 2013 (%)
Barcelona LNG terminal		29,0%	71,0%
Sagunto LNG terminal		31,0%	69,0%
Cartagena LNG terminal		15,0%	85,0%
Huelva LNG terminal		37,0%	63,0%
Mugardos LNG terminal		47,0%	53,0%
Bilbao LNG terminal		52,0%	48,0%
TOTAL L	NG TERMINALS	43,0%	57,0%
Maghreb pipeline (import only from Morroco)		75,0%	25,0%
Medgaz (import only from	Argelina)	83,0%	17,0%
Lorrou	Import (F=>E)	100,0%	0,0%
Larrau	Export (E=>F)	70,0%	30,0%
Irún Diriotou	Import (F=>E)	100,0%	0,0%
Irún-Biriatou	Export (E=>F)	22,0%	78,0%
Dortugal (Padaiaz (Trus)	Import (P=>E)	22,0%	78,0%
Portugal (Badajoz+Tuy)	Export (E=>P)	60,0%	40,0%

Table 34. Available physical average capacities in 2013 (LNG terminal and Interconnections).Source: ENAGAS

Gas infrastructure investments entering into operation in 2013

These pipelines have entered into operation in 2013:

- Two stretches of Bilbao Plant-Treto pipeline (45+8 Km, 16 inches), that connect the Basque Country with Cantabria.
- Zarza de Tajo-Yela pipeline (100 Km, 30 inches), which enhances the central area of Spain, where it is the underground storage of Yela.
- First branch of Huercal-Overa-Baza-Guadix pipeline, which connects the provinces of Almeria and Granada (82 Km, 16 inches).



a) Investment in LNG import terminals (2014-2015)

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. 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 2014-2015.

Investments in LNG import terminals 2014-2015					
Transmission System Operator	New infrastructures	Current state	Foreseen date		
	Sagunto LNG terminal				
SAGGAS	Increase in emission capacity up to 1.200.000 Nm ³ /h	Planned ³³	2014		
	Bilbao LNG terminal				
BBG	3 rd storage LNG tank	Planned	2014		
	Increase in emission capacity up to 1.200.000 Nm ³ /h	Planned	2015		

Table 35. Planned LNG infrastructures for 2014-2015. Source: ENAGAS

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.

³³ Subject to an increment of demand above expected.

CNMC COMISIÓN NACIONAL DE LOS MERCADOS Y LA COMPETENCIA



Figure 28. Interconnection capacity between Spain and France. Source: ENAGAS

c) Investment in Transmission network

In 2014, the following transport pipelines will come into service in the Spanish gas system:

- Branch to Mariña Lucense (82 Km, 16 inches), which enhances the Galicia's transport system in Lugo's coast.
- Son Reus-Inca-Alcudia pipeline (45 km, 10 inches), which connects those towns to the Mallorca's transport system.
- Second branch of Huercal-Overa-Baza-Guadix pipeline, which connects the provinces of Almeria and Granada (52 km, 16 inches).
- Second branch of Llanera-Otero interconnection (1 km, 26 inches), which connects Llanera with Otero, in Asturias.
- El Musel-Llanera pipeline (16 km, 30 inches), which connects Gijon's port with Llanera.

d) Investment in Underground storage project

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.
- Marismas, that entered in operation in 2012, 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):

	Maximum storage capacity (GWh)
Underground storage	29.141*
Tanks in LNG terminals	22.084
Linepack	1.000
TOTAL	52.225

 Table 36. Storage capacity in Spain: underground storages, LNG tanks and pipelines³⁴

 Source: ENAGAS

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 will be 1.550 million m3 of natural gas (1.9 bcm).

The underground storage of Castor is currently under evaluation, due to the occurrence of seismic activity during the injection of cushion gas in September 2013.

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.

³⁴ The underground storage capacity will be increased up to 40.665 GWh after the filling of cushion gas of Castor and Yela.



The peak demand can be easily supplied by an increase in the production of the six regasification plants, as they have a large excess of regasification capacity.

5 Consumer protection and dispute settlement in electricity and gas

5.1. Consumer protection

As mentioned in Chapter 2, in 2013 the Spanish regulatory framework of consumers' protection was highly reinforced.

On one hand, the general framework for consumers' protection was modified by the Act 3/2014 revising the text of General Act of Consumer Protection and transposing into the Spanish law the Directive 2011/83/EU of 25 October on Consumer Rights.

This new legal provision obliges traders to adopt the new set of contractual guidelines as from June 13, 2014. In this regard, it is important to mention that the legal provisions are also applicable to electricity and gas contracts. In particular, the Act 3/2014 has introduced new measures in switching for gas and electricity, setting up clear procedures when desisting from a switching request and procedures in case of non-requested switches.

In general terms, the Act 3/2014 harmonizes a set of concepts such as "consumer", "trader", "distance contract", "off-premises contracts" and "durable medium", among others.

Likewise, it is worth mentioning the strengthening of the information that must be provided to consumers before the execution of contracts. In particular, such information shall be provided in distance and off-premises contracts.

Moreover, the legal provisions on customer service, additional payments and charges for the use of certain means of payment have been also modified in this new draft of the Consumers Act.

Concerning electricity and gas markets, additional measures have been introduced by Act 3/2013, including the Ministry taking over responsibility for information and complaint handling, although the NRA remains in charge of other protective functions, such as handling the web gas and electricity price comparison tools:

http://www.cnmc.es/es-

es/energ%C3%ADa/consumidores/comparadordeofertasdeenerg%C3%ADa.aspx

As of 31 December 2013, the comparison tool counted 495 active offers of gas, electricity or dual supply from about 41 different companies.

Suppliers shall inform clients about their rights and establish a procedure in the case of complaints. Free customer information services must be made available, including free phone lines. Additionally, the Electricity Act (Act 24/2013) provides that CNMC will monitor the



effectiveness and application of consumer protection measures and may issue legally binding resolutions aimed at their fulfilment.

Spain maintains public service obligations through Last Resort Suppliers. The concept of vulnerable customers has only been established so far for electricity customers. According to the Act 24/2013, "vulnerable customer" will be defined according to certain social and economic conditions and consumption patterns; however, the definition of vulnerable customer is still pending.

For the time being, the vulnerable customers who receive the "social bonus" should fulfil at least one of the following criteria: a large family or a family where all members are unemployed; be low voltage consumers (less than 1 kV) with contracted demand lower than or equal to 3 kW; or a pensioner older than 60 years with a minimum level pension. Vulnerable customers' electricity tariffs are reduced by means of a "social bonus", which sets their tariffs at the July 2009 level. As of December 2013, 2,498,850 customers were defined as vulnerable. The cost of this social subsidy is financed by vertically integrated companies with generation, distribution, and retail activities.

Compliance with Annex 1

As mentioned, the Electricity Act 24/2013 introduces important provisions on customers, some of them derived from the Third Package and others proposed by the Spanish NRA. According to the new Act:

- Consumers have the possibility to participate directly in the market.
- A deadline of 21 days for switching supplier (free of charge) is set up.

• There will be a dispute resolution procedure managed by the Ministry of Industry, Energy and Tourism. This procedure will be transparent, simple and free of charge. Furthermore, there is the possibility of alternative resolution (arbitration) by consumer authorities.

• CNMC will monitor the effectiveness and implementation of consumer protection measures and will be competent to issue binding enforcement resolutions.

• The contractual conditions will be equitable and transparent with clear and understandable language. Customers will be protected against abusive or misleading sales procedures.

• There is the possibility to choose among different payment methods.

• Transparent information on energy costs shall be ensured in the bill.

• Consumption data will be available for the consumer and data can be transferred to suppliers, under consumer agreement.



• The customer will receive a settlement of the former supplier's account not later than 42 days following a switch of supplier.

• Suppliers and distribution companies will facilitate a customer service telephone number free of charge for the consumer.

• The supplier will inform the customer about the origin of the energy supplied as well as environmental impacts related.

• "Social bonus" will be a public service obligation as set forth by Directive 2009/72/CE.

• Essential supply points (including domestic consumers that need continuity in the supply for running medical equipment) cannot be disconnected.

Ensuring access to consumption data

As established by Act 3/2013, CNMC is entitled to ensure access for customers to their consumption data, in an understandable format, and in a quick and harmonised manner.

The Ministry of Industry, Energy and Tourism sent a request to the Spanish NRA 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.

The 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.

The 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, the 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.

More recently, the legal provision on electricity tariffs for households was further developed by Royal Decree 216/2014 setting the Voluntary Price for the Small Consumer.

The new Voluntary Price for the Small End-Consumer (PVPC) changes the method whereby the price of power is calculated on the bills received by small end-consumers: whereas this



price was previously set by a quarterly auction, bills will now be based on the price of electricity in the market.

Red Eléctrica de España, as Spanish TSO, is responsible for managing the new "Voluntary Price for Small Consumer" (PVPC). This price is calculated daily by the Spanish TSO based on the energy prices per hour in the market and applying the average consumer profile. Therefore, the price of electricity can change every hour as the electricity market evolves and the amount of the electricity bills will depend on other additional factors at the consumption level, such as the weather and energy demand.

To this end, it has developed an IT information service through which the small consumer can be fully informed of the price of electricity that will be applied in accordance with this Royal Decree. This new system let end users change their consumption patterns and improve the management of their electricity consumption.

The prices that the system operator will publish through the "Voluntary Price for Small Consumer" IT service will apply only to those consumers whose contracted power capacity does not exceed 10 kilowatts (kW). These prices will be applied to the electricity consumption (variable energy charge - kWh consumed) of the bill that the system operator calculates using the new approved methodology.

In this way, Red Eléctrica offers consumers who have opted for PVPC, the ability to see the financial impact of their electricity consumption depending on the access costs plan chosen between the general tariff, the night tariff or the super-valley tariff (electric vehicle).

The impact of these prices on the bill are reflected in the variable energy cost, which represents about 60% of the total for consumers covered by the general tariff and 70% for those with a night-time tariff or a super-valley tariff. In any case, the price per hour to be applied will be the price that the user is going to pay for each kWh consumed.

The total of the electricity bill is completed by the inclusion of a fixed charge proportional to the power contracted by the user as well as the taxes established by current legislation.

These prices will be applied to all residential consumers, whether they have smart meters with hourly metering or not. In the latter case, prices will apply based on the profiles that Red Eléctrica draft with the new methodology approved by the Government and will be published and updated weekly on Red Eléctrica's "eSios" website.

5.2. Dispute settlement

Duties and powers of the regulatory authority of dispute settlement in the electricity market

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.





CNMC is responsible for dispute settlement related to access to the transmission and distribution grids. The deadline for issuing a decision is the same that required by the Directive (2 months) as set forth by Act 24/2013 (Article 33.3). The decision is binding for the agents involved in the dispute and could be appealed directly to the Court.

On the other hand, CNMC 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 2013, CNMC settled one dispute related to a wind facility concerning access to the distribution network and one dispute related to the economic and technical management of the system.

Duties and powers of the regulatory authority of dispute settlement in the gas market

According to article 12 of Act 3/2013, 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, CNMC is responsible for solving any disputes that may be taken to it with regard to the economic and technical management of the system and transport, including connection facilities.

The decision is binding for the agents involved in the dispute and should be appealed directly to the Court.

Additionally, CNMC shall act as an arbitration body in any dispute that may referred to it by agents carrying out activities in the electricity and hydrocarbon market.

In 2013, CNMC didn't settle any conflict in the gas market.