

Empowering Mediterranean regulators for a **common energy future**.

Working Group on Institutional Issues (INS WG)

Mediterranean Energy Regulatory



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Abstract

This document presents the status of energy regulation in the Mediterranean Basin and aims to provide a complete overview about how the national energy sectors are ruled, ranging from independent entities to governmental bodies. Each regulator is analyzed according to a number of dimensions (such as independence, organization, transparency and accountability). These features are directly linked to the principles for good regulators defined by MEDREG Members, in order to support the development and reinforcement of national regulations along the same directions, in order to create a harmonized environment to foster investments, competitiveness and consumer protection.

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EXECUTIVE SUMMARY

Objective

The aim of this Regulatory Outlook report is to contribute to the development of a more independent and solid governance model of regulation by assessing the current situation of each MEDREG member regulator and help identifying scope for improvement.

Approach

Taking into account the work MEDREG carried out in 2014 to identify good regional regulatory principles, this report was based on the answers to a questionnaire divided into six sections, covering several aspects of national regulatory frameworks:

Principle	Description
Independence	Independence from national and regional government and from the industry guarantees regulatory stability and neutrality and avoids situations in which the decisions of the regulator are constantly modified or taken under influence.
Competences	Duties and powers should constitute a minimum set of competences defining the specific responsibilities of a regulator to promote competition and to empower consumers.
Internal organization	Effective organization means to have clear decision making processes and an operative internal structure, with distinction of roles and responsibilities.
Enforcement	Enforcement is to ensure compliance with rules by market participants and regulated entities, in order to obtain the public benefit that regulation provides.
Transparency in the regulatory process helps understand the regulator's work and is beneficial for a stakeholder engagement.	
Accountability	Accountability means that the regulator takes on the responsibility and is able to demonstrate outcomes and results from its regulatory action.

Each National Regulatory Authority (NRA) has been provided with a set of multiple choice questions on the aforementioned aspects. Additionally, the questionnaire included space for further explanation on the answers.

Findings

In most countries, national energy regulatory issues are addressed by either primary (such as laws, decrees, acts) or secondary legislation (such as regulations, codes, by-laws). In terms of independence, almost all MEDREG members are distinct and functionally independent from any other public and private entity. Almost every NRA is autonomous with regards to carrying out any regulatory task. In nearly every NRA there are some formal rules that prevent the regulatory authority staff such as board members and experts from having interests in regulated utilities or occupying leading political functions. Board members' independence is safeguarded by law and an internal regulation applies to staff members as well. Moreover, the regulatory authority's decisions are binding in every NRA, which is a significant institutional power. As an indication of financial independence of the regulatory authorities, almost every regulatory body is financed by own resources. Overall, Mediterranean NRAs have comparable and satisfactory levels of independence, which guarantees regulatory stability and neutrality and avoids situations in



which the decisions of the regulator are constantly modified or taken under influence.

Almost every NRA supports full opening in the electricity and where possible gas markets. With the exception of Israel, Malta and Turkey, there are national timetables for the full opening of the electricity and gas markets in all Mediterranean countries.

Market opening is an extremely important feature for Mediterranean energy markets, which are oriented towards increasing competition between utilities and correspondingly improve the quality of service for consumers. In this sense, answers shows that all the responded NRAs approve the necessity of market opening in energy sector for the reason of its advantageous features and all regulatory authorities cooperate with Competition/Anti-trust authorities, so as to establish or maintain the competition environment.

The report shows how the level of competence in tariff setting is satisfactory among the NRAs, although some have room to improve their competences.

Regarding the tariff setting regime, there are some differences among the MEDREG countries that responded to the questionnaire. As a general comment, almost all NRAs have the power to fix and approve tariffs, although in several cases the role of regulator could benefit from clarifications and improvements.

Not all NRAs are responsible for dispute settlement between industry and customers. Indeed, the report highlights that some NRAs may be entrusted with more powers in terms of dispute settlement.

Every NRA that answered the questionnaire sets or approves rules regarding the management and allocation of interconnection capacity. Every NRA indicated that they are responsible for customer protection, although the level of responsibility differs, especially in terms of addressing vulnerable consumers' needs.

The large majority of NRAs has the power to decide on its own internal organization. In addition, most of NRAs decide on human resource policy.

All NRAs have the power to sanction sector participants, however the extent of this power widely differs and would benefit from further analysis.

Most NRAs publish the information on the regulatory authority (missions, duties, organization chart, and reports) and make these information available to stakeholders, including the publication of an Annual Report and the regular use of consultations to inform their decisions.

The majority of respondents have reporting obligations to regularly report to another public body such as government, ministry or parliament.

Next steps

This present report be presented as MEDREG's contribution to the work performed by the Union for the Mediterranean (UfM) Platform on a Regional Electricity Market (REM) and will provide a basis for forthcoming MEDREG support activities to member countries to be performed in 2018.



1 Introduction

Demand in the Mediterranean region is growing rapidly as a result of population and economic growth. Most of the increase in Mediterranean energy demand is expected to be concentrated in Southern and Eastern Mediterranean countries. In this changing context of fast growing energy demand, regulation is even more necessary to implement energy policies and improve security of supply. Regulation is also an essential tool for the integration of energy markets and for non-discriminatory access to infrastructure.

MEDREG is committed to regularly providing an overview on the existing regulatory frameworks in member countries as well as to identifying some examples of good practice. In 2016, MEDREG placed particular emphasis on the legal status of Mediterranean regulators, taking the initiative to build a Regulatory Outlook for the region. The scope of this Outlook is to provide a review of the competences of Mediterranean energy regulators and their role in the market. The aim of this work is to contribute to the development of a more independent and solid regional regulatory model. The document provides the means to understand the regulatory condition of each country and benchmark regional challenges and gaps, identifying scope for improvement.

This reports highlights that Mediterranean NRAs do not only face similar challenges but share an increasingly similar approach in order to achieve and strengthen their independent role as market referees. For instance, he assessment of the regulators' situation and performance, the transparency of the exercise of their duties and powers for all stakeholders in the sector and their accountability to national parliaments should not be understood as a burden, but as an important chance to demonstrate the well-functioning of NRAs as impartial body in the sector and to identify needs for improvement.

MEDREG considers that this report will allow a better fine-tuning and programming of the actions of the Association and will allow member regulators to compare their situation in detail to those of their neighbors. In addition, MEDREG will share this report with the Union for the UfM REM Platform, contributing to the identification of the regulatory gaps and challenges in the region.

In MEDREG's view, this report shall lead to the development actions and recommendations for the improvement of regulatory approaches in the region, as part of the ultimate goal to encourage a consistent and robust regulatory climate in the Mediterranean.

2 Context

The preparation of a Mediterranean Regulatory Outlook was approved during the 17th General Assembly of MEDREG on 17 November 2014 as an important tool to identify regulatory frameworks that would improve the role and independence of the regulator. This is the 3rd benchmarking study within MEDREG which gives a clear and most recent picture of the region.

As part of the Action Plan of the Institutional Working Group for the period 2016-2018, MEDREG has committed to undertake a Regulatory Outlook exercise, to provide an overview on the existing regulatory frameworks in its Member countries as well as to identify some examples of good practice. Based on this analysis, the Outlook will also provide recommendations for the development of regulatory approaches in the region, as part of the ultimate goal to encourage a consistent and robust regulatory climate in the Mediterranean.

The regulatory outlook questionnaire builds on previous benchmarking reports as well as several previous MEDREG deliverables, and draws from established approaches to review sectorial regulation.

3 Objectives

The aim of this work is to contribute to the development of a more independent and solid governance model by assessing the current situation of each regulator and helping identify scope for improvement.



4 Methodology

Taking into account the work carried out in order to identify the good regulatory principles that have been agreed by MEDREG in 2014, the questionnaire has been divided into six sections, in order to organically describe each regulatory framework covering the below mentioned aspects:

- Legal status
- Independence
- Competences
- Internal organization
- Enforcement
- Transparency and Accountability

Each NRA has been provided with a set of multiple choice questions on the aforementioned aspects. Additionally, they were given space to comment on their answers.

Answers from 20 member countries ¹have been received namely:

Country	Authority	
Albania	Albanian Electricity Regulatory Authority (ERE)	
Algeria	Electricity and Gas Regulation Commission (CREG)	
Bosnia and Herzegovina	State Electricity Regulation Commission (SERC)	
Croatia	Croatian Energy Regulatory Agency (HERA)	
Cyprus	Cyprus Energy Regulatory Authority (CERA)	
Egypt	Egyptian Electricity Utility and Consumer Protection Regulatory Agency (EgyptERA)	
France	Regulatory Commission of Energy (CRE)	
Greece	Regulatory Authority for Energy (RAE)	
Israel	Public Utilities Authority – Electricity (PUA)	
Italy	Italian Regulatory Authority for Electricity, Gas and Water (ARERA)	
Jordan	Energy and Mineral Regulatory Commission (EMRC)	
Malta	Regulator for Energy and Water Services (REWS)	
Montenegro	Energy Regulatory Agency (REGAGEN)	
Morocco	Ministry of Energy, Mines, Water and the Environment (MEMEE/ANRE)	
Palestine	Palestine Electricity Regulatory Council (PERC)	
Portugal	Energy Services Regulatory Authority (ERSE)	
Slovenia	Energy Agency for the Republic of Slovenia (AGEN-RS)	
Spain	National Commission on Markets and Competition (CNMC)	
Tunisia	Ministry of Energy, Mines and Renewables (MIT)	
Turkey	Energy Market Regulatory Authority (EMRA)	

¹Libya is missing due to the political situation in the country.



5 Sections of the questionnaire

In order to properly describe the regulatory framework and to support a closer fulfillment to MEDREG good regulatory principles, the questionnaire has been divided in different sections.

5.1 Legal Status

The legislative framework is not a principle but is a crucial aspect to understand nature, origin and development of the regulator. This aspect provides a picture useful also to understand the environment where the regulator is asked to operate. For instance Members were asked to point out the current status of the entity devoted to regulate the energy sector (either existing, to be established or not yet foreseen) with clear references to underlying primary or secondary national legislations. Moreover, the clarity of the regulatory role was investigated to analyze potential relationships with other bodies involved in the regulatory decision making process: an overlap or a failure in the distinction of roles and responsibilities among different entities may be fatal for a correct decision making process.

5.2 Independence

Independence from national and regional government and from the industry guarantees regulatory stability and neutrality and avoids situations in which the decisions of the regulator are constantly modified or influenced. Such a crucial feature is analyzed according different points of view, also considering directly which are the practical measures and provisions put in place to guarantee an independent behavior of board and staff members.

a) Political and Legal Independence

One of the most important regulatory principles is the full independence of the regulator from political and industrial interests e.g. from national and regional governments, political organizations and any public and private body. Different relationships with other institutions are investigated such as Government, Ministry or Parliament in terms of formal obligations (for instance submitting tariff methodology or annual activities report) and influence on Board Members (power to appoint or revoke them).

MEDREG members have been asked to describe which constraints board and staff members may be subjected to when they join or leave the regulator and which are the consequences of non-compliance with said constraints. In order to prevent conflicts of interests, provisions may forbid holding energy companies' shares, being employed in regulated entities during term in office or not being engaged after the end of their service in the regulatory body (cooling-off period).

b) Financial Independence

Independence of the regulatory authorities may be subjected to undue that limit the financial resources that the regulator is eligible to receive, thus severely affecting the pursuit of the regulator's mission. Members have been asked to describe their sources of financing (e.g. national budget, market participation fees, fines), their autonomy in elaborating and approving the budget, and to detail whether some kind of external control on their activities exist.

c) Functional Independence

Generally, in the legislative framework, clear mechanisms are put in place to appeal a regulatory decision, which is a prerequisite of a state grounded on the rule of law. It is important to understand to whom energy sector parties may appeal to defend their interests, if they feel they may be harmed. Political or external influences may hinder or even nullify the effectiveness of a regulatory decision, while an Administrative Court or Supreme Court may be a more independent solution.



5.3 Competences

Duties and powers should constitute a minimum set of competences defining the specific responsibilities of a regulator to promote competition and to empower consumers. Regulatory competences generally refer to monitoring (including access to information), tariff setting, rule-making, dispute settlement, and consumer protection.

a) Information Access

Regulation rules extremely sensitive sectors, highly and directly affecting revenues and costs for regulated entities and consumers. Therefore is of great importance to elaborate regulatory provisions on evidence base, to demonstrate the rationales behind each decision in front of stakeholders. Only if a phenomenon is measured, it is possible to control and to address it. In order to be able to know all features useful to analyze the evolution of energy markets and infrastructures, regulators need to have access to any information available by market or system operators. This requires access to a wide range of information from sector participants, such as financial, technical and commercial data.

b) Security & Quality of Supply

Depending on the legislative framework, regulators may be in charge to monitor the evolution of the demand as well as the necessary infrastructures to guarantee an appropriate security of supply, even providing support to elaborate and implement the required actions, for example organizing and managing tendering procedures for new infrastructures.

Moreover the regulator may monitor the main features of networks development and operation, for instance to elaborate a regulation to incentivize better performances in the services to be delivered to consumers. This means monitoring the quality of supply in term of number and frequencies of interruptions, the frequency and voltage stability in the electric networks, the pressure and the calorific values of the provided gas.

c) Market Opening & Market Monitoring

Although not fundamental, market opening is an important feature of energy markets which increases competition between utilities and correspondingly increases service quality and customer satisfaction.

However, considering the inner nature of energy sectors, which are characterized by goods delivered through natural monopolies such as power or gas networks, the role of a regulator is crucial to evaluate and observe the evolution of energy markets, in order to intervene and correct potential distortions. Such continuous monitoring can allow to sanction abuses and market manipulations, paving the way for a fair competition and consumer protection, even considering the support of other institutions such as Competition Authorities or Ministries.

The regulator must be allowed to collect data from regulated entities and directly from stakeholders to receive feedback from the ground to correct and improve the regulation.

d) Tariff Setting

One of the important competencies of NRAs is the power to fix transparent and nondiscriminatory tariffs for connection, access and use of energy infrastructures such as electric networks or gas pipelines.

Tariffs should be cost reflective, provide incentives for efficient new investment and avoid crosssubsidies amongst network users.

The regulator should be responsible for fixing those tariffs in order to guarantee the economical sustainability of network development and ensure that costs passed on through consumers are duly economically justified.

e) Licensing

The regulator may be in charge to support or be directly involved in a license regime to build



and operate energy infrastructure (such as networks, generation power plants, gas storages, Liquefied Natural Gas (LNG) regasification units) which may consists different phases ranging from issuing licenses, determining terms of reference, monitoring its compliance to imposing sanctions and fines. With particular regard to limited market opening, this competence is extremely sensitive since it may allow distortions in the market if the procedures are sufficiently robust and nondiscriminatory.

f) Dispute Settlement

In its *super partes* role of energy sector, promoting its non-discriminatory, fair and transparent development and operation, the regulator is asked to settle disputes which may arise among stakeholders. Considering the asymmetrical market power and knowledge between industry and consumers, regulators tend to set up different mechanisms to solve such litigations in the most simple and economic way. The approach is to support smaller consumers to affirm their rights and to reduce time and costs for both parties, for instance avoiding to appeal to a Court.

In more advanced cases, the regulator may intervene in dispute between industry operators, for instance when infrastructures access is not guaranteed according the timetable reported in the license.

g) Unbundling

In order to guarantee as much as possible the above mentioned nondiscriminatory and transparent access, energy infrastructures must should be developed and managed according to clear and transparent procedures. An important aspect is to ensure there is a separation of the management of the infrastructure from the ownership to weaken the market power of the biggest firms. This separation can take place under three options: ownership unbundling, independent system operator (ISO) and independent transmission operators (ITO). An extensive and complete knowledge of costs of regulated entities (Transmission System Operators (TSOs), Distribution System Operators (DSOs), etc.) allows regulators to set cost effective tariffs to be transferred to end users. Anyway, an infrastructure "neutrality" may be ensured more effectively with a complete separation between market oriented operators and natural monopolies.

h) Technical Competences

The regulator's mission should be characterized by detailed instructions, provisions and guidelines to rule the regulated sectors according to MEDREG good regulatory principles. This means that the regulator is provided of some powers to concretely and effectively discipline and address regulated entities (metering rules, transmission capacity allocation, grid codes, etc.) toward the general scopes which the legislative and regulatory frameworks assign to the energy sector: partially or entirely market opening, consumer protection, investments promotion, security of supply.

i) Consumer Protection

Consumer protection shall be deemed as another significant factor which should be in every regulatory authority's charge for the development of the energy market. The relevant asymmetric knowledge between consumers and industries requires the regulator to promote their raising awareness about their rights, simple and cheap access to dispute settlement, high quality of services and, in some cases tariffs to support more vulnerable consumers. A number of instruments may be put in place such as compliant management, price comparison tools, information campaign, alternative dispute resolution process, with adequate effective powers to sanction sector participants in case of no compliances.

5.4 Internal Organization

Effective organization means to have clear decision making processes and an operative internal structure, with distinction of roles and responsibilities. Moreover, since the high level skills which are required to staff members, regulators were asked to describe recruitment process and



human resources management, referring also to economic issues, training and carriers dynamics. These aspects may be relevant to attract and to retain experts from industries, where most of the technical and regulatory skills may be found.

To collect such features, regulators were asked to evaluate Information Technology (IT) and Human Resources (HR) budgets as percentages of their total budget, as well as indicate the total number of employees in main departments.

5.5 Enforcement

Enforcement is to ensure compliance with rules by market participants and regulated entities, in order to obtain the public benefit that regulation provides. Moreover only real powers provide the regulator with a "watch dog" role that can effectively act to induce fully compliant behavior from sector participants.

Therefore regulators were asked to describe which are the mechanisms to sanction sector participants, such as reducing tariffs, applying fines, and if they have been practically applied (i.e. evaluating fines total amount).

5.6 Transparency & Accountability

Transparency in the regulatory process helps others to understand the regulator's work and is beneficial for a proactive stakeholder engagement. Accountability means that the regulator takes on the responsibility and is able to demonstrate outcomes and results from its regulatory action.

A number of questions shed light on how transparency is assured, with regard to regulatory provisions or general information on the authority itself, for instance publishing detailed information on their websites or issuing annual reports.

Considering significant impacts regulatory decisions may have, regulators may implement different tools to engage stakeholders in different stages of the regulatory decision making process. This approach support a fact based regulation, gathering opinions, data and technical expertise from sector participants with public hearings or open consultations.

Finally accountability process are investigated, since public bodies may be invited to refer about their main activities and results, not only if required by legislation but even in front of stakeholders thus enhancing their accountability.

6 General Overview on Mediterranean Energy Regulation

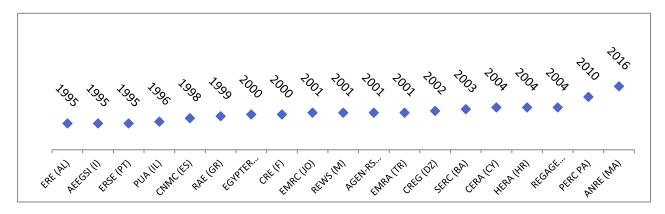
In the following sections, a detailed overview is provided aiming to identify main trends in the energy regulation in the Mediterranean.

6.1 Legal Status

NRAs are currently established in 20 countries. The first regulators were created in 1995, while the last one was established in 2016.



Figure 1: Year of establishment of energy regulators



All these NRAs regulate electricity sectors, while most of them regulates gas as well. Some other include in their perimeters other energy sectors such as oil, fuel, district heating. A small number are multisector regulators since they may include water (AEEGSI, REWS), Mining and Nuclear sectors (EMRC) or communication, audiovisual, postal transportation and competition (CNMC).

Figure 2: Regulated Sectors

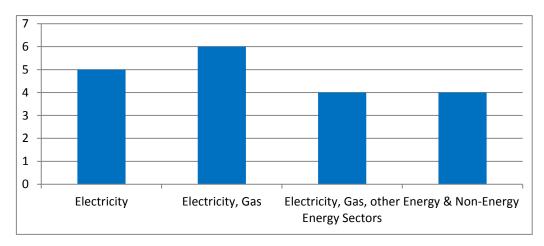
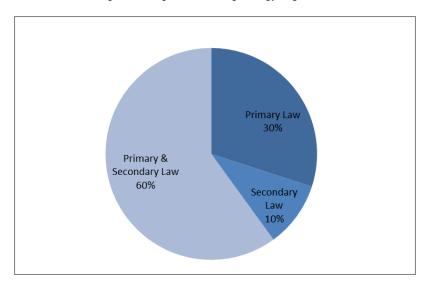


Figure 3: Legislation ruling energy regulation



All NRAs are public bodies. In 12 countries (Algeria, Cyprus, France, Greece, Israel, Italy, Morocco, Palestine, Portugal, Spain, Tunisia and Turkey) there are bodies, other than the



regulatory authority, that make, amend, assist with regulatory decisions (licensing, tariffs) or get involved in the regulatory decision-making process. These interactions ranges from direct approvals of some regulatory decisions to a more correct interaction where NRAs independently implement guidelines approved by governmental bodies. It is seen that in these countries there are clear legal provisions defining the roles and powers of the NRAs.

6.2 Independence

Independence from national and regional government and from the industry guarantees regulatory stability and neutrality and avoids situations in which the decisions of the regulator are constantly modified or influenced.

a) Political and Legal Independence

In terms of independence, almost all MEDREG members are distinct and functionally independent from any other public and private entity, with several exceptions. The Israeli regulator for electricity has independent legal department, intern controller and budget. However, the authority was constituted inside the ministry of energy and to a certain extent the minister can interfere with some decisions). In Jordan, the Ministry can intervene in the decisions of the regulator. In Cyprus, the regulator may take direct instructions from the Minister of Energy concerning Public Service Obligations and, under certain conditions, concerning licensing criteria. In Palestine several regulatory functions are undertaken by Ministry.

In order to enforce independence, there are always some formal rules that prohibit the regulatory authority staff to have employment relationships with energy industry while holding their positions in the regulatory authority, except in the cases of Jordan and Slovenia. The penalties may consists in the removal from office or administrative penalties (such as in the case of Greece). Similar rules exist that prohibit the regulatory authority (i.e. Board members and staff) to have interests, e.g. hold shares, in regulated utilities or execute leading political functions.

In almost every NRA, board members' independence is safeguarded by law and an internal regulation applies to staff members as well. Regarding to the formal obligations to the government and to the Parliament, the annual report is the most common obligation even if it is mainly for information. Other interactions between the regulator and the political power concern the approval of the draft budgets and the work plans since this enters directly as main inputs of the NRAs. There are also some advisory roles in crucial issues such as the submission of opinions about national development plan or security of supplies.

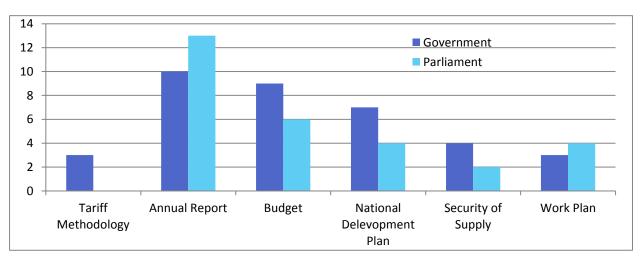


Figure 4: Formal obligations to Government and Parliament

Regarding the appointment of the Board Members and Chairman, there is not a prevailing



approach, even if the appointment from the government (or one of its members) is slightly more prevalent. In eight cases, there is a difference between the proposing and appointing bodies.

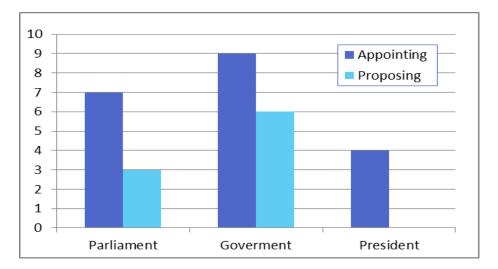


Figure 5: Board Members nominations

For instance in Albania, the proposal comes from a "Selection team" composed of two representatives from the Parliament (the chair of parliamentary commission on energy and the chair of the parliamentary commission on economy and from the responsible minister on energy). In Italy, Board members are appointed by decree of the President of the Republic following nomination by the Council of Ministers on the basis of a proposal by the Minister of Economic Development. Nominations are submitted to the competent Parliamentary Committees for scrutiny, and the appointment is based on a two-thirds majority vote.

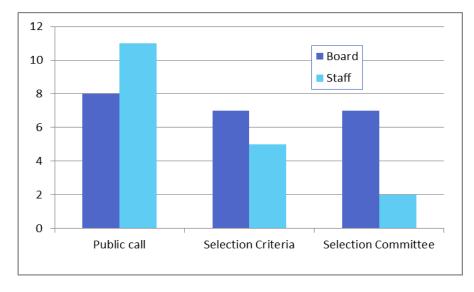


Figure 6: Staff selection

In most of the NRAs there is an open call to hire board members and staff, defining ex ante criteria for selection and a committee is set to identify the best choices. This is a an option which should be extended to guarantee independent and competent NRAs members.

While the nomination should come from the highest political level of authority, the power of the government/parliament shall not result in any instruction being given concerning regulatory tasks. However, in all the respondent countries, Board members and/or chairman can only be taken from office in certain cases such as criminal offenses or ailing health. This is a strong indication of NRAs' independence while performing regulatory duties.



Moreover, there is a period for Board Members and\or Staff Members not to be engaged with regulated entity after their service in the regulatory body (*cooling-off period*) in 13 NREs with up to 3 years cooling-off period for CRE (France).

b) Financial Independence

As an indication of financial independence of the regulatory authorities, almost every regulatory body is financed by own resources. Only a small number of regulators (CRE, PUA, and MEMR) are solely financed through national state budgets.

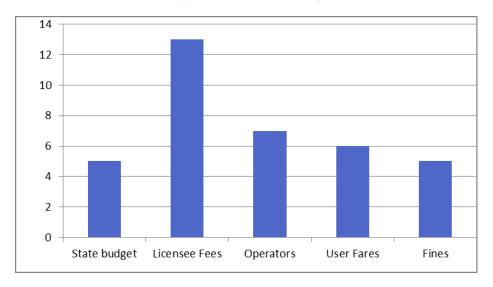


Figure 7: Sources of funding

Regulators' own resources generally consist of license fees. For AEEGSI, market participation fees are the only source of budget. Fees are autonomously defined by the NRAs in 12 cases, otherwise are generally set by the Governments. Some NRAs integrate their budget with donations and grants form international organizations and agencies. In the cases of ERSE and EMRA funds may be provided by publications or studies.

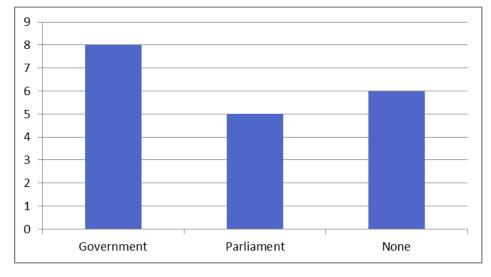


Figure 8: Budget Approval Obligations

In most cases, NRAs have to seek approval for their budgets from the parliament, government or ministry while, due to the austerity for the economic crisis, a significant number of NRAs stated that they are subject to constraints arising from the central budget. All NRAs reported to be subject to annual financial review by external auditors, sometime private or independent. As a general remark, NRAs should be given more support in terms of financial independence.



c) Functional Independence

In every regulatory framework, there is a mechanism in place for parties to appeal a regulatory decision either to Administrative Court or to Supreme Court. The decisions of the NRA remains in effect pending appeal except for Italy and Israel. Overall, NRAs have comparable satisfactory levels of independence, which guarantees regulatory stability and neutrality and avoids situations in which the decisions of the regulator are constantly modified or taken under influence.

6.3 Competences

a) Information Access

All NRAs have full information access to such data and information, even if some NRAs has reported to have some difficulties to obtain a complete data set, mainly from small regulated entities.

b) Security & Quality of Supply

Almost all NRAs monitor medium and long-term supply/demand balance on the national market, expected future demand and envisaged additional capacity, quality and level of maintenance of the networks and quality of supply. ERSE monitors quality of service while EMRA, beyond monitoring quality of supply and level of maintenance of the networks, verifies also progress of power plants under construction.

Almost half of all NRAs participate in the implementation of measures to cover peak demand and to address any shortfalls of suppliers, this being sometime a role which is covered by other entities (such as network operators) while NRAs always monitor and report about these issues.

Where tendering procedures exist for new capacity/infrastructure/investment, almost 50% of all NRAs are involved in the tendering procedure, for example EMRA establishes general guidelines for how the tendering process works concerning distribution grid investments.

It can be said that the coherence of the monitoring provisions of NRAs concerning security and quality of supply varies too much in the region and should be improved.

c) Market Opening & Market Monitoring

From a general overview with different levels, the majority of MEDREG members (13 over 20) have opened their electricity markets. Market opening is an extremely important feature of energy markets which increases competition between utilities and correspondingly increases service quality and customer satisfaction. In any case, there is a different approach for gas market: in Cyprus, Malta and some Portuguese Islands this is due to geographical reasons, while there is no gas market for instance in Algeria, Bosnia and Herzegovina, Egypt, Israel, Tunisia, while in Turkey households can't choose their supplier. In some cases, such as Algeria, Cyprus and Egypt, NRAs are called to monitor the sector, in order to eventually propose a roadmap. Such advisory role is performed in 11 countries, where NREs are asked to provide proposals and comments on the energy sector, highlighting the crucial responsibility and position as national institutions.

In many cases (16 over 20 NRAs) regulatory authorities are responsible for collecting information on market dominance as well as on predatory and anti-competitive behavior, generally cooperating with Competition or Anti-trust authorities, so as to establish or maintain a competitive market environment.

d) Tariff Setting

Regarding the tariff setting regime, almost all NRAs are deeply involved in the process, ranging from approving other entities' decisions or autonomously setting and fixing methodologies or tariffs.



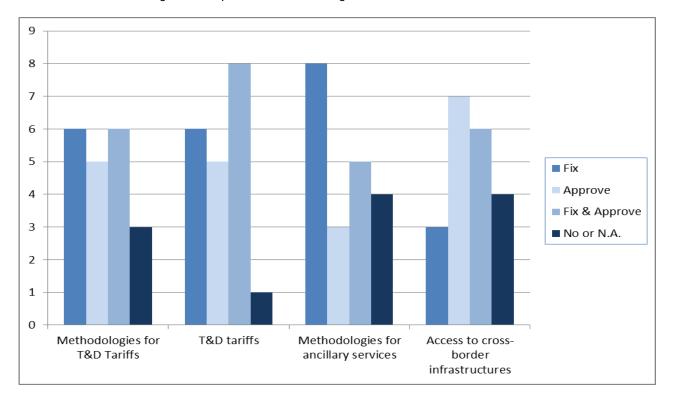


Figure 9: Responsibilities concerning tariffs for use of infrastructures

Almost all NRAs have the power to require transmission and distribution system operators to modify terms and conditions, tariffs, rules, mechanisms and methodologies to ensure they are cost reflective, and applied in a non-discriminatory manner. Moreover 15 NRAs can include performance-based components in the tariff methodologies, and have the power to penalize a non-performing undertaking via reduced rate of return over the tariffs.

It is very important to underline that 80% of all NRAs provide a detailed evaluation of the data and methodologies used for taking its decisions as part of its ex-ante approval process, to demonstrate the rationales behind their provisions.

It can be noted that the level of competence in tariff setting is satisfactory among NRAs, although some have room to improve competences on tariff setting.

e) Licensing

Only in France and Slovenia licensing regime does not exist. On the other hand, some countries have licensing regimes, such as Italy, Portugal, Spain and Morocco, that do not involve energy regulators, as the licensing processes generally belong with the Ministries. For instance in Italy AEEGSI may address observations and recommendations to the Government and Parliament with regard to licenses, and to the Ministry of Economic Development with regard to licensing, convention and authorization schemes. In Tunisia, the national regulator (Ministry of Energy) participates in the *Commission Supérieure de la Production Indépendante d' électricitée* which is competent for the licensing regime.

Where the license regime is managed by the regulator, NRAs have the power to issue licenses, determine the terms and conditions of licenses, review and monitor licenses and their compliance with the terms and conditions, modify licenses, impose a fine on licenses for infractions and report infractions for violations of terms and conditions of licenses as well.



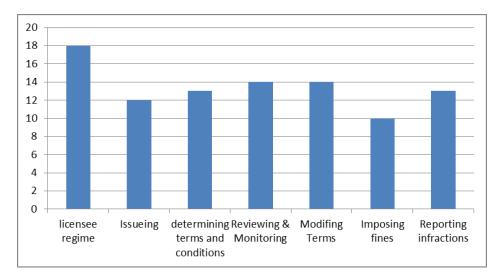


Figure 10: Energy regulators roles in licensing regimes

However, as it can be noted from the graph above, only in a few cases the regulator holds all the regulatory powers for licensing.

f) Dispute Settlement

Almost all NRAs have a role in solving disputes, with the exception of Israel and Tunisia. This role may be played through an Arbitration Chamber (CREG) or a Dispute Settlement Committee to operate as a separate body as in the case of the Moroccan Regulator. In Greece, RAE may be involved in the dispute settlements if both parties agrees to solve the dispute through a Mediator procedure.

Regarding the involved parties, as reported in the following graph, the majority is charged to handle claims and disputes between operators and between operators and consumers. Among those who mainly deal with operators, for instance CRE (France) has a role in disputes involving 1) operators and electricity or gas transmission or distribution network users; 2) operators and natural gas storage facility or LNG facility users; 3) operators and carbon dioxide transmission and geological storage facility users.

On the other side, AEEGSI (Italy) has set up Alternative Dispute Resolution mechanisms to support solving disputes between consumers and market operators with a web-based solution where parties may virtually meet on a voluntary basis to try to solve claims.

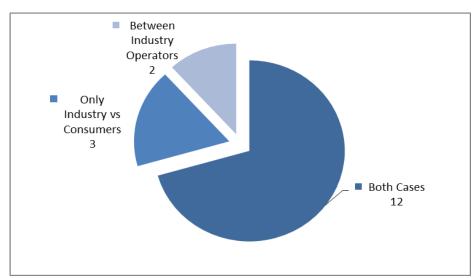


Figure 11: Role in dispute settlement



In almost all countries (75%), any interested party may bring to the regulatory authority a complaint against a transmission or distribution system operator on issues related to non-discrimination, effective competition, efficient functioning of the market, transmission and distribution tariffs, and provision of balancing services.

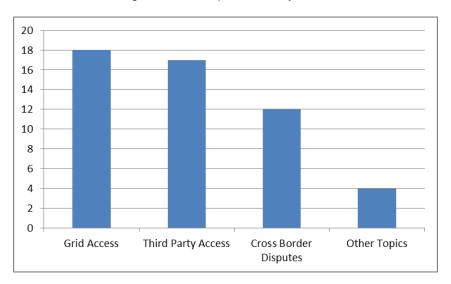


Figure 12: Main topics settled by NRAs

Grid and Third Party Accesses (TPA) are the main topic of these complaints. Other topics include consumers related issues such as unfair commercial conducts, errors in billing, undue disconnections and switching, or other issues related to license holders responsibilities.

In some case there are specific committees to handle disputes. In Morocco, all disputes, including disputes related to access to interconnection points, are brought up in front of the Dispute Settlement Committee.

g) Unbundling

The great majority of regulators (almost 70%) has a role with respect to utility unbundling. Only in some countries such as Bosnia and Herzegovina, Israel, Jordan and Tunisia there is no role at all, probably because the unbundling of infrastructures is not imposed by law.

Also where unbundling is prescribed by primary legislation, not all NRAs have the different responsibilities which may include:

- establishing guidelines on how separate accounts should be drawn up for unbundled entities:
- establishing rules regarding the allocation of costs resulting from the unbundling process;
- drawing up guidelines for compliance review and for reporting obligations regarding the unbundling process;
- imposing changes in accounting practices where the regulatory authority determines that the sector participants are not sufficiently unbundled.

For instance in Portugal, Law and Regulatory Codes prescribe the unbundling rules applicable which are monitor by ERSE who must prevent cross-subsidization between different activities. ERSE, according to the rules applicable, can refuse to accept costs which represent detected cross-subsidization



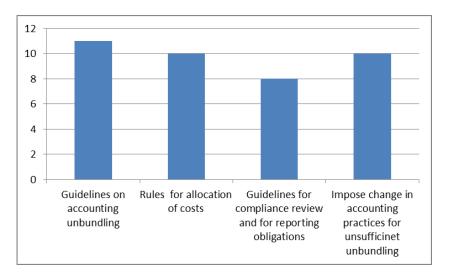


Figure 13:NRAs' roles in unbundling practices

h) Technical Competences

These are probably the most impacting powers and responsibilities since they are relevant to high level issues.

As reported in the following figure, the most diffused are setting or approving rules regarding the management and allocation of interconnection capacity.

Another important task is the issuing of secondary legislation, including market rules, grid codes and other such technical rules, even if some NRAs (REWS, REGAGEN) do not have the power to draft secondary legislation, but just to approve it.

Concerning electrical networks, the power to approve operational and planning standards including schemes for the calculation of total transfer capacity is the least diffused competences, even if many NRAs may require that transmission and distribution operators correct any congestion difficulties.

A significant number of NRAs may grant exemption/s for third party access for new investment. In the case of Morocco there is no such provision in the legal framework, while in Turkey exemption is not defined in the Natural Gas Market Law and in the related legislation, therefore EMRA has no such power for natural gas.



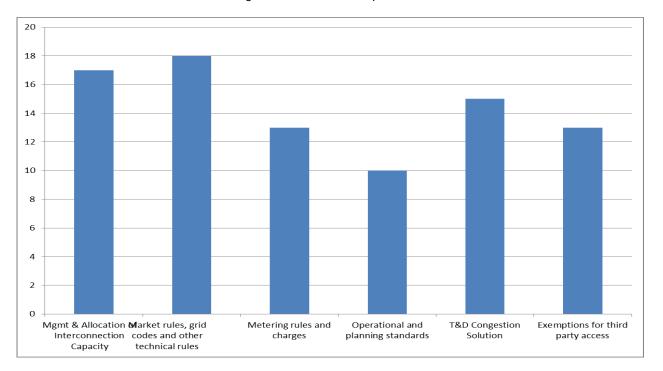


Figure 14: Technical Competences

Almost all NRAs have the power to set/approve/provide an opinion on quality of service standards and congestion management rules/standards, but only half of all NRAs have the power to sanction or intervene in cases of violations of such service standards.

Only a few numbers of NRAs maintain an audited account of any revenues collected pursuant to congestion management mechanisms.

Regarding infrastructure development planning, NRAs have limited roles with respect to investment planning and cost recovery, both nationally and regionally, likely because most of them relate to powers which are in the hands of the national governments.

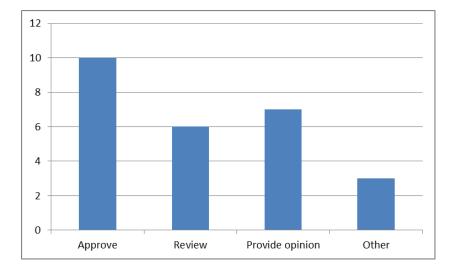


Figure 15: Powers on Infrastructure Planning & Cost Recovery

i) Consumer Protection

With the exceptions of France (CRE has only the obligation to inform all consumers and ensuring access to customer consumption data for all consumers) and Morocco (consumer protection is not allocated within regulator's competences) all NRAs are responsible for customer protection in their regulated sectors, although the level of responsibility differs.



This activity is carried out aiming to increase consumer awareness about their rights. For instance, CRE has created and participates in the website energie-info.fr, in conjunction with the *Médiateur national de l'énergie* (national energy ombudsman) and the Directorate of the Ministry in charge of consumer issues. This one-stop service aims at informing consumers about their rights and the steps they can take concerning energy.

In order to receive support when complaining about potential violations of their rights, many NRAs have put in place complaint management schemes (i.e. Alternative Dispute Resolution).

Some regulators provide assistance in checking or monitoring energy prices, mainly with web based solutions, aiming to facilitate the understanding of their bills and\or the analysis to choose a different supplier. For instance, in Italy AEEGSI has a website² where consumers may compare and subscribe contracts voluntarily proposed by suppliers and prepared according to some guidelines elaborated by AEEGSI.

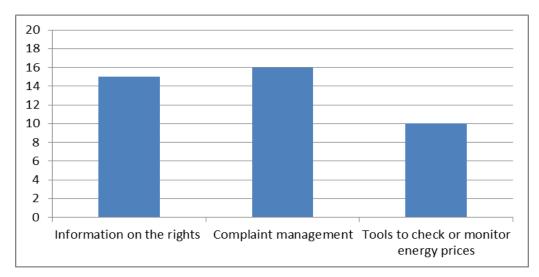


Figure 16: Measures to support energy consumers

It may be noted that in terms of addressing vulnerable consumers' needs, eight NRAs (CERA, RAE, PUA, AEEGSI, EMRC, REWS, ERSE and AGEN-RS) somehow implement certain measures, while others do not intervene to support vulnerable consumers, since it is an issue mainly dealt with by Ministries. For instance CERA, EMRC and REWS set prices to support vulnerable consumers, while CERA, PUA, AEEGSI, EMRC, RAE and ERSE implement measures defined by the government.

² https://www.portaletutelasimile.it/



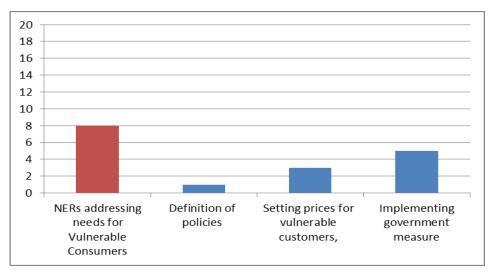


Figure 17: NRAs and Vulnerable Consumers

The support to consumers is explicitly expressed also with regard to commercial quality delivered by distributors. Almost all NRAs have the power to monitor the time taken by sector participants to make connections and repairs, but fewer may intervene and impose sanctions if the time taken is too lengthy. For instance in Slovenia, AGEN-RS is not allowed to intervene, but market participants have the duty to inform in advance the reason and period. On the other side, RAE has the power to intervene if necessary to ask justification of the reasons which caused the delay. RAE has also approved a program of commitment of Distribution System Operators for the provision of certain services within a deadline, which foresees a redress of a small amount to the customers who have suffered a delay above the deadline.

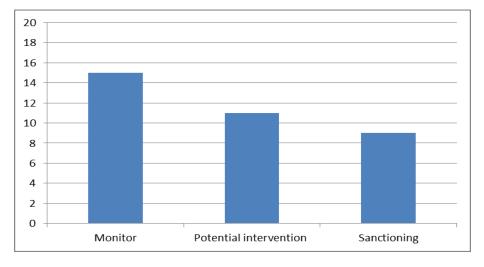


Figure 18: Competences for networks connections and repairs

Competences of NRAs vary across the region. NRAs' compliance to the MEDREG's good competence principle is not uniform. Hence there is room for further converging NRAs' duties and powers to promote competition and to empower consumers.

6.4 Internal Organization

According to the responses received, all NRAs have the power to decide on their own internal organization, with the exception of Turkey, where the Law defines the names and competences of the regulator's departments and the regulator is then tasked with their organization, and of Spain.

Most regulators have the power to autonomously decide on their human resources policy,



including the hiring and firing of staff as well as staff allocation and composition, with the exception of the regulators of Albania. CERA (Cyprus) can act autonomously in the context of the regulator's budget, which is approved by the Council of Ministers and the Parliament. These bodies also approve the job description for each position at the regulator. RAE (Greece) and EgyptERA (Egypt) have to respect a hiring ration established by the law for all positions in the public sector. The majority of regulators uses pre-established criteria to conduct entry exams and interview for perspective staff.

When it comes to taking a final decision in terms of hiring, there is a mixed picture among Mediterranean regulators. In 9 cases out of 20, the Board of the regulator is not the final decision-maker for hiring new staff nor for setting incentives and penalties for the existing staff. In the case of France, Israel, Montenegro and Morocco the President or Director of the Board is the final responsible about hiring decisions. As for the other regulators, the Board takes care of managing new and existing people. AEEGSI (Italy) and ERSE (Portugal) specify that in their cases hiring takes place as a collegial decision of the Board, which generally delegates the Head of Human Resources to carry out the overall selection process.

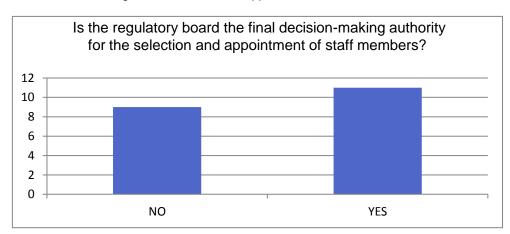


Figure 19: Selection and appointment of staff members

In the majority of countries, the employees of the regulator obtain the status of civil servants, presenting however a mixed picture both in Europe and in North Africa. In France and Spain some staff members are civil servants, while others are not. In Italy, terms and conditions of employees are specific for independent regulators. In Morocco, employees are civil servants, however the regulator can call on contractors for specific missions within the framework of a standard contract adopted by the Board and for a period not exceeding two years, renewable once.



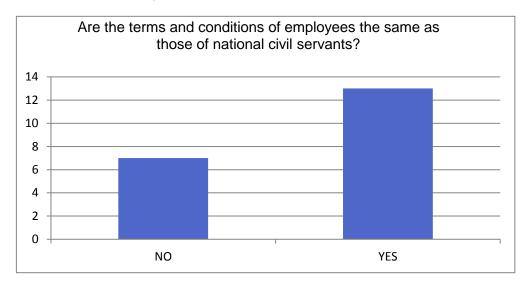


Figure 20: Civil servant status of staff members

In the Mediterranean region there is a very diverse situation for what concerns the salary for Board members. In a slight majority of countries (both in Europe, the Balkans and North Africa), the pay scale of corresponding public officials is used as benchmark. In Albania, the rates of the private sector are considered. In France, the salaries for Board members are established by a number of regulatory texts published in the country's Official Journal. Most regulators offer their Board members salaries that are in line with those of civil servants, government officials and industry officers. However, there are some exceptions. In Portugal, salaries at the regulator's Board are generally higher than those of the government and industry, in accordance to the specifications given by the law. In France, salaries of the Board members correspond to the remuneration of a director in a central administrative body, but they are slightly lower than salaries of members of the government, and lower than the salaries of the top management in the industry. The same applies in Jordan. In Greece and Italy, salaries are similar to those of governmental officers, but substantially lower than those of the industry.

A similar situation applies to the other categories of employees at the regulator. Generally, the staff is offered a level of salaries similar to those of civil servants and industry officers. In Croatia, they are set internally, while in France the regulator is free in determining its salary policy and determines it according to professional experience/background of the staff and to competitive rates in the sector. In Spain, for those employees that are not civil servants, there are reference tables included in collective agreements. In 13 countries out of the 20 surveyed, energy regulators have a binding code of ethics for the staff.

The number of staff members varies sensibly between Mediterranean NRAs, with the largest one counting 500 employees and the smaller one having a staff of 15 people. On average, NRAs count around 131 employees in their staff.



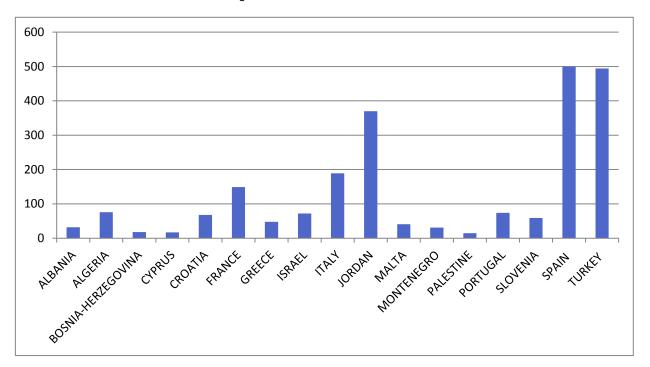


Figure 21: Number of staff members

Most regulators can autonomously determine the number of employees they need. In the case of CERA (Cyprus), due to general austerity measures the Ministry of Finance has restricted the position filling for any organization that is considered to be in the general public sector. CRE (France) is subject to a headcount, but with the possibility to defend its needs before the Parliament. On the contrary, in Greece the total number of staff is limited only by the number already published on the Official Gazette. Similarly, in Slovenia the number of employees is not determined by the energy law but by the general legislation on public administration.

A slight majority of regulators have an Information Technology (IT) system that allows regular data monitoring from energy sector participants. This majority includes EU countries (with the exception of Cyprus), Jordan and Turkey. For example, AEEGSI (Italy) collects almost 100 different types of data for different aspects for its regulated sectors, which contents are provided on periodical basis by regulated entities.

The average budget of Mediterranean regulators corresponds to 19 million euros. Around 51% of this budget is devoted to staff salaries, while an average of 2.5% is used to buy and maintain IT technology. On average, 2/3 of the answering regulators considers their budget sufficient to perform their activities. However, some notice that more staff would be necessary in order to fulfill their duties according to the law.

6.5 Enforcement

An overwhelming majority (75%) of member regulators has the power to sanction sector participants, when necessary. The Moroccan regulator, which is currently being set up, is authorized to carry out on-the-spot checks to ensure that compliance of the entities it supervises with the laws and regulations applicable to their activities. More specific enforcing powers have not however been defined, so far.

The majority is less decisive as regards the opportunity to expose uncompliant operators, publishing comparative reports demonstrating insufficient performance by some network operators. In this case, 60% of the regulator are entitled to this enforcement measure. In the case of EMRA (Turkey) it is not possible to prepare ad-hoc documents showing non-compliance, but it can be inferred from the data of annual or monthly reports.



When violations occur, 9 regulators out of 20 can revise tariffs or reduce rates of return in response. Among the regulators which do not cannot exert this power, CRE (France) specifies that it however has the power to require TSOs and DSOs, if necessary, to modify the terms and conditions, including tariffs or methodologies, although not for sanctioning purposes.

Several other enforcement mechanisms are however in place for 13 Mediterranean regulators. For example, CERA (Cyprus) can revoke licenses or impose compensation measures; EgyptERA (Egypt) and EMRC (Jordan) can impose sanctions and fines; CRE (France) and ERSE (Portugal) can impose a temporary prohibition of network access and professional activities, as well as penalty payments. Regulators have indeed used these powers. For instance, in 2015 AEEGSI (Italy) gathered more than 5 million euro coming from fines while EMRA (Turkey) sanctioned a limited company due to the fact that it did not submit its capacity report to the Regulatory Authority in due time.

Enforcement is also ensured by the voting procedure of the Board for 16 regulators out of 20. In the majority of cases, the number of Board members is even, so that a clear majority is always expressed. In other instances, such as for CRE (France), RAE (Greece) and EMRA (Turkey) when there is a deadlock the vote of the President decides. In the case of RAE, this does happen when the decision concerns imposing sanctions.

6.6 Transparency and Accountability

All NRAs (except Israel and Morocco) publish the information on the regulatory authority (missions, duties, organization chart, and reports) and make these information available to stakeholders via websites or issuing reports. With the exceptions of MEMRE, ANRE and EMRA,NRAs publish all main decisions of the regulator published/made available to all stakeholders (while protecting commercial sensitive information). In the case of ANRE, the law provides that the tariff for the use of the national electricity grid, the tariffs for the use of the medium-voltage power grids, the opinions of the Dispute Settlement Commission, the annual activity report will be published in the Official Bulletin.

Almost all NRAs publish Information on all sorts of regulatory issues and practices, such as licensing, tariffs, market monitoring, etc. should be found in regulator's web site., all NRAs provide this basic necessary information about the institution on their web sites.

The language is also another necessity of very high concern that the NRAs should provide the necessary information in English in their website, as well. Only half of the total NRAs publish English versions of the essential information on their websites, yet.

A very important remark is to be highlighted about consultation. With three exceptions, NRAs generally consult on draft decisions before taking final decisions. The systematic use of consultation is very important since it allow to build a evidence-based regulation and a fruitful stakeholders engagement. As reported in the figure, NRAs consult in different ways stakeholders, with a clear preference to public hearing and written consultation.

For instance, in Portugal ERSE's decisions within the framework of its regulatory powers are subjected to public consultation of stakeholders. Also before adopting a final punitive decision, the accused has the opportunity to be heard. In Spain, CNMC's decisions on general acts such as regulatory frameworks on tariffs are subject to public consultation.



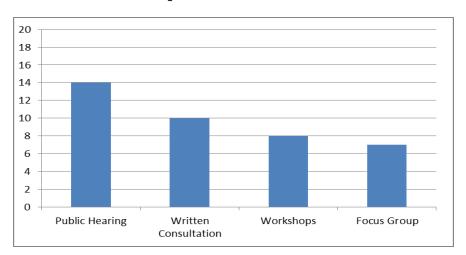


Figure 22: Consultation tools

Accountability means to provide information on how an institution fulfills its mission. Being public entities, all NREs issue an annual report which is possible to take a look at the activities and operations of the regulatory authorities and creates a chance to make evaluation at the end of the year.

Except for CERA, even independent regulators have all to report to another public body such as government, ministry or parliament. For instance ERSE is independent in the performance of its duties and is not subject to governmental supervision or oversight. Nevertheless, as reported in its Statute, ERSE has the obligation to annually report its activity both to the parliament and government, as well as to keep the government informed of its regulatory activity and must annually send to the parliament and government its plans and reports, from which the multi-annual activity plan, the annual budget, and the annual report and accounts are subjected to approval of the government members responsible for finance and energy.

6.7 Highlights

The general overview provide a significant information about the status of energy regulation in the Mediterranean. It is worth underlining that the compliance to the MEDREG Good Principles is more and more diffused.

Regulators are established in almost all countries with very few exception, and some of them are 20 years older as ERE (Albania) and AEEGSI (Italy). Just in 2016, a new regulator has been formally established in Morocco even the support of MEDREG, albeit it must start its activities.

Although most of the regulators are set as independent entities, a lot of interactions and formal obligations are in place toward the Parliament or Government.

Comparing the latest data with the 2013 Benchmarking Report issued by MEDREG, which was based on data provided by 15 member NRAs, the number of staff has increased, probably since their competences have been increased also in terms of complexity. A similar increase is to be reported in the budgets and in satisfactory information technology resources.

It may be noted that, despite the power to monitor operators performances, there is a small number of NRAs which have power to sanction and impose fines on non-compliance operators. Consumer protection is also a very important item in the regulatory missions with a numbers of NREs deeply engaged in programs and activities to increase awareness and empowerment of energy consumers. Great attention is devoted to accountability since all NRAs' websites, which are regularly updated, include all relevant information needed in native languages. The percentage of implementation of the internal code of ethics for regulatory staff (prohibition of ownership in energy companies, time period to be employed in sector after leaving the NRA,



etc.) has increased in comparison to the 2013 report.

7 National Energy Regulatory Frameworks

7.1 ERE (Albania)

7.1.1 Legal Status

The Albanian Energy Regulator Authority (ERE) is the regulatory institution for electricity and natural gas sectors in Albania. ERE was established in 1995 and actually operates based on Law no. 43/2015, of 30.04.2015 "For power sector" and Law no.102/2015 of date 23.09.2015 "For natural gas sector". ERE is a legal and public entity legally and functionally independent from any other public or private entity. ERE cooperates with the responsible Ministry for Energy and other Government institutions, in respect to issues related to the laws mentioned above which relates with their areas of responsibility. Within 31 March of each year, ERE shall submit to the Albanian Parliament an annual report on the energy sector situation and ERE's activities for the previous year.

7.1.2 Independence

a) Political And Legal Independence

ERE is the regulatory institution for electricity and natural gas sector in Albania, which is led by the Board. The Board is composed of its Chair and four members. The Chairperson and the members of the Board shall be appointed by the Parliament based on a proposal from a selection team. The team selecting board shall be composed of two representatives from the Parliament of Albania, respectively the chair of the responsible parliamentary commission on energy and the chair of the responsible parliamentary commission on economy and from the responsible minister on energy. There is a public call for the candidates to select the chairman/board members and the staff. For the Chair/Board members, no later than three months before the termination of terms of the Chair of ERE or one of the Board members, the Parliament publish the notification on the vacancy. The selecting team shall pre-qualify two candidates that fulfill the requirements and propose the candidates to the Parliament.

The Chair and the board's members shall be a person who meets the following requirements:

- the Chairperson should be a well-known person in the energy field. He/she shall have at least 15 years working experience in the energy sector;
- one of the board's member shall have not less than 10 years working experience in the power sector with profession of electrical engineer;
- one of the board's member shall have not less than 10 years working experience in the hydrocarbons sector with profession of engineer in the area of oil and/or gas;
- two other members with legal or financial professional background, who shall have not less than 10 years working experience, out of which not less than 5 years in the energy sector.

The Chair and the board members are appointed for a term of 5 years with the right to be reappointed for another mandate. The Chair or any member of the Board may be dismissed from the Parliament if they act not in compliance with the principal of independency or are under the conflict of interest position; or if this is punished for committing a criminal act by a final court decision.

The Chair and any member of the Board shall be released from the duty by the Parliament in case of resigns, runs as candidate for elections as Member of Parliament, runs as candidate for



elections of a local authorities, is no longer able to fulfill the duties and responsibilities of ERE for a term over 6 months, when is absent from the work place, without cause, for more than 1 month.

Based on the Law no 43/2015 "On Power Sector" in article 11 (7) and the Law no 102/2015 "On Natural Gas Sector" articles 13-21 stipulate that ERE Board of Commissioners decides on ERE organizational chart, number of employees and their salaries. However in order to harmonize these provisions, it is necessary to amend the Law no 152/2013 "On Civil Servants" as amended and Law no. 9584 "On the payments salaries and the structures of constitutionally independent institutions and other independent institutions established by law".

There are formal rules that prohibit the regulatory authority (i.e. Board Members and staff) to have interest, hold shares in regulated utilities or execute leading political functions. As defined by Law no. 43/2015 "On Power Sector" article 15, the chair, any board member or the technical staff of ERE may not be:

- owner, shareholder or holder of assets, or any part thereof, of a licensee holding a license under the terms and conditions of this Law;
- employed or subcontractor of a licensee holding a license under the terms and conditions of this Law;
- member of supervisory board or other relevant governing bodies of a licensee active in power sector in Albania;
- director, administrator or cannot exercise any other management position of any licensee holding a license under the terms and conditions of this Law.
 - b) Financial Independence

The regulatory authority is financed by its own resources, the regulatory fees and the license application fees. ERE's budget is approved by the board. ERE has full autonomy in the implementation of its budget. The ERE determines and approves a regulatory fee to be paid by the licensees, in accordance with the said regulation. The fee should be proportionate to annual income generated by the activity performed by the licensee. The *auditing of ERE's financial activity shall be carried out by chartered accountants in* compliance with the legislation in force.

c) Functional Independence

All ERE Board Decisions are subject of appeal to Administrative Court, within 30 (thirty) calendar days, starting from the date when the decision is published in the "Official Gazette".

7.1.3 Competences

a) Information Access

Based on the Law the regulatory authority requires any information from the licensees in the course of performing its tasks.

b) Security & Quality Of Supply

Transmission and distribution system operators shall develop specific rules, containing minimum requirements on grids security and operation, including rules on quality of supply and grid security performance. During the developments of such rules and requirements, transmission and distribution system operators shall consult with the relevant stakeholders in and outside the country. The rules on the quality of supply and the security of network performance shall be approved and monitored by ERE.

ERE shall supervise the maintenance of an appropriate level of technical capacity reserve of the transmission from the transmission system operator, which also cooperates with operators of interconnected transmission systems of neighboring countries, for purposes of ensuring the grid operation security.



c) Market Opening And Market Monitoring

Based on the law, the electricity customers connected to the 110 KV voltage and above as well as any other client regardless of the voltage level of the electricity network which is connected that has an annual energy consumption more than 50 million KWH, shall be considered to have emerged in the liberalized market. The customers connected to the 35 KV voltage level are obliged to emerge in the liberalized market no later than June 30 2016, meanwhile the customers connected in voltage 20 kV, not later than December 31, 2016 and the customers connected to the voltage level 10 kV and 0.6 kV, no later than December 31 2017. The customers connected to 0,4 kV voltage have the right to freely choose their supplier. ERE has the right to monitor and control contracts execution and the performance of services by the licensees, exercising the right of inspection, access of documentation and information on licensees, and maintaining confidentiality of the received information.

d) Tariff Setting

ERE approves and publishes, pursuant to the transparency principle, the transmission, distribution, universal service or other applicable public service tariffs and their methodologies. In setting or approving the tariffs or tariff methodologies and regarding the balancing services, ERE shall ensure the appropriate short-term and long term incentives against transmission and distribution system operators to increase efficiency, market integration, security of supply and support of the related research activities.

Applicable on nondiscriminatory basis on all grid users and shall be transparent, reflect the need for grid security assurance and reflect the real costs.

Administrative offences shall be sanctioned by ERE with fines from 0.1% to 3% of the annual turnover of the licensee for the previous year.

e) Licensing

Any legal person who exercises his activity in the power and natural gas sectors must be equipped with the respective license issued by ERE in compliance with the provisions of this law. ERE has the power to:

- Issue the licenses
- Determine the terms and conditions of the licenses
- Review and monitor licenses and compliance with the terms and conditions
- Modify the licenses
- Impose a fine on the licensees for infractions
- Report/announce infractions for violations of terms and conditions of the licenses.

f) Dispute Settlement

ERE acts as dispute settlement authority regarding complaints filed by customers and disputes rose between or among the licensees according to specific rules and procedures. Any concerned party having a complaint against the transmission or distribution system operator and any licensee regarding the implementation of their obligations under the definitions of this law or other bylaws on electricity sector, may refer those complaints for settlement to ERE. ERE decides on the dispute within 30 days from the registration date of the complaint. Such term can be extended for additional 30 days, in case ERE needs addition information on the case. The disputes settled by the regulator are for:

- Grid access
- Third party access
- Cross-border disputes



g) Unbundling

Any licensee shall, in their internal accounting, keep separate accounts for each of the exercised licensed activity, and for any other activity not related to energy sector, with a view to avoiding discrimination, cross-subsidization and jeopardizing of competition. These accounts may be presented as consolidated, apart from cases when carried activities relate to energy distribution or transmission. Based on the law, ERE shall establish and adopt a uniform and standardized system of accounts for all licensees engaged in the power sector, based on the effective legislation and internationally accepted accounting standards. The regulator authority does not have the duty to establish rules regarding the allocation costs resulting from the unbundling process.

h) Technical Competences

ERE shall exercise its activity in compliance with this Law and the effective legal framework.

ERE has the power to:

- a) Approve the market rules on power sector
- Approve and publish, pursuant to the transparency principle, the transmission, distribution, universal service or other applicable public service tariffs and their methodologies;
- c) Approve and publish, pursuant to the transparency principle and considering the costs of the offered services, the tariffs for:
 - (i) Connections and access to the national grid, including tariffs for the transmission and distribution;
 - (ii) Balancing services, which offers appropriate steam for the users of the grid for balancing the energy entering into the grid and the energy consumed from the grid;
 - (iii) Licensee's activities when the public wholesale obligation is defined;
- d) ensure access to the cross border infrastructure, including the procedures on the capacity allocation and the management of limited capacities;
- e) decide on the public service obligations to the Licensee including Supply Universal service in accordance with the article 47 and 85 of this law;
- f) ensure unbundling and other obligations of transmission and distribution system operators, in compliance with the provisions of this Law.
- g) cooperate in regard to cross-border issues with the regulatory authorities of other countries concerned and with the Energy Community Regulatory Board for harmonizing the regulatory framework for the development of the regional electricity market, including the cross-border exchanges of electricity and the rules regarding the management of interconnection capacities; f) take measures/avoids cross-subventions between transmission, distribution, and supply activities as well as between categories of the clients;
- h) ensure, together with other relevant authorities, the effective implementation of consumer protection measures, including those referred in Articles 86, 96 and 88 of this Law:
- i) cooperate with Competition Authority and market surveillance body on the review of the anti-competition conduct or any other activity of the market participants
- ensure access to consumption data, for enabling the usage of an easily understandable harmonized format at national level for consumption data, prepared from system operator;



- k) publish the conditions on the quality of services offered by the system operators;
- contribute to the compatibility of data exchange processes for the most important regional market data;
- m) promote energy efficiency measures and demand management, and improvements in the quality of service in electric power sector;
- n) publish on its website quarterly based reports related to the electricity market operation.
- o) With the proposal from the Licensee approves the regulations on:
 - purchase and exchange for the procedures executed by all market participants exercising the functions of generator and supplier in charge of rendering the public service;
 - b. Security of energy supply for covering the losses in the distribution and transmission grid.
 - i) Customer Protection

One of ERE tasks during the performance of their regulatory functions defined based on Law is to ensure that customers benefit through the efficient functioning of the national market, promoting effective competition and customer protection.

The Ministry responsible for social affairs shall, determine, in cooperation with the Ministry responsible for energy and the Ministry of Finance, in consultation with ERE and stakeholders, the criteria and procedures to obtain the status of customers in need, their rights, which are approved by a decision of Council of Ministers.

7.1.4 Internal Organization

During 2015 Albania accomplished to transpose the Third Energy Package in the Electricity and Gas sector by approving the respectful primary laws. Having transposed the Third Energy Package, Albania's Law on Electricity Sector under article 11 point 7 and Albania's Law on Gas sector say that Energy Regulator's Authority Board defines its organizational chart, the number of employees, the payment and financial treating". However in order to insure the full implementation of the Third Energy Package and to enforce this provisions, amendments to the Law No.152/2013 on the Civil Servants as amended, as of 17 July 2006, on the Payments, Salaries and the Structures of Constitutional Independent Structures and Other Independent Institutions, Established by Law, are deemed necessary.

Because of the above mentioned the regulator cannot decide on its human resources policy; i.e. to hire and fire the staff, decide on staff allocation/staff composition. The specific criteria used for hiring the staff members are according to the civil servant law. The terms and conditions of the employees are the same as those of the civil servants. Also because of the amendment on Law no.152/2013 on Civil Servants the regulatory board is not the final decision-making to remove and set penalties and incentives for the staff members.

The salaries of the Board members are on similar level with those of civil servants, government officials and industry officers. The salaries for the staff members are established according to the competitive rates in the sector. These salaries are on the similar level with those of the civil servants, government officials and industry personnel in the energy sector.

ERE staff consist of 32 staff members. The annual budget of the regulator authority is 1,250,630 euro. It costs 1 euro/consumer in one year. ERE budget is approved by the board. ERE has full autonomy in the implementation of its budget. ERE financial sources shall be regulatory fees and license application fees as approved by the authority.



7.1.5 Enforcement

In case of non-compliance ERE may sanction the sector participants. ERE may publish comparative reports demonstrating the insufficient performance of the network operators. ERE has a procedure to avoid the deadlock in regulatory board decisions. The number of the Board members needed to achieve a decision-making quorum is not less than three board members and the decisions are adopted with the majority of all members.

7.1.6 Transparency and Accountability

On ERE official website there is updated information of the regulators mission, duties, organization chart, reports available to the stakeholders. The website provide information on the primary and secondary legislation on power and natural gas sector, all ERE decisions, the registration of the licensees, the license conditions while it is protected the commercial sensitive information. Almost all information on the website is available in English.

The regulator consults its draft decisions before taking the final decision. We could mention here the certification process. There is also a consultation process through public hearings with all the stakeholders. As mentioned above the number of the Board members needed to achieve a decision-making quorum is not less than three board members and the decisions are adopted with the majority of all members.

7.2 CREG (Algeria)

7.2.1 Legal status

The Algerian Commission de Régulation de l'Électricité et du Gaz (CREG) is an independent body created by Law No. 02-01 of 2002 to regulate and control the electricity and gas sectors. As an independent body, CREG is entrusted of making its own decisions under the terms of its founding law, procedures and regulations.

7.2.2 Independence

a) Political & Legal Independence

The Commission is led by a Management Committee. This Committee is composed of a Chairman and three (3) members appointed by a presidential decree following a proposal by the Minister for Energy. There is no public call however for the submission of applications and selection criteria are not reported. The term in office for the chairman/board members is not fixed. There is no mandate.

The position of a CREG Board Member is considered incompatible with any other professional activity, any public employment and any possession, direct or indirect, in a company of the energy or business sector. Any Board Member found to be in breach of this condition is declared as resigned from its position. However, even on such case, a Presidential Degree is required.

Also, chairman and/or board members can be removed from office in case that they have a criminal record. Until nowadays, there has never been an occasion where the CREG Chairman or Board Members have been removed from office such reasons. The decisions of CREG are taken by simple majority, and are only valid if they are taken in the presence of three (3) members, including the Chairman. If there is a tie, the President's vote is decisive. CREG also comprises an Advisory Board and an Arbitration Chamber. The board includes two (2) representatives from relevant ministerial departments. Operators, consumers and CREG employees may also be members of the Advisory Board. The Advisory Board supports and advices the Management Committee. The recruitment process for hiring staff members is carried out by public and open applications.



The Table below summarizes the formal obligations of CREG vis-à-vis the government:

Table 1:CREG Formal Obligations for Approval

Obligations	Government	Parliament
Tariff Methodology	Х	
Opinions on Security of supply issues	X	
National Development Plans		
Draft Budget	X	
Annual Work Plan	X	
Annual Activities Report	Х	

b) Financial Independence

CREG is financially independent. The Authority is funded through license fees and fares collected from end consumers. CREG has the power to set the level of the fees so as to meet budgetary needs. The Ministry of Finance through the General Inspectorate of Finance assesses the way CREG manages its own resources. The budget process is established by law. CREG's budget must be presented for approval to the Ministry of Energy.

c) Functional Independence

All decisions of CREG remain in effect pending appeal. CREG decisions may be subject to judicial appeal before the State Council. The decisions of the Arbitration Chamber (are not subject to appeal.

7.2.3 Competences

a) Information Access

By law CREG has full access to financial and technical information from sector participants. However, it is acknowledged that often cooperation is challenging and operators do not communicate the data requested. CREG maintains an up to date IT system which allows for regular data monitoring from energy sector participants.

b) Security & Quality Of Supply

CREG monitors the medium and long-term supply/demand balance. It estimates future demand and the technical capacity required to meet demand. It also has the right to make necessary arrangements for meeting the domestic market needs. CREG establishes and submits to the approval of the Ministry in charge of energy an indicative program of power plants needs over the ten next years, approves development plans of electricity and gas transmission networks submitted by the concerned TSO's. The Commission has the right to launch a tender procedure for the development of new power production facilities in case of lack of offer. CREG may provide an opinion related to establishing standards on security of supply. CREG has competences over ensuring a good quality of service and has the power to consult the operator and inform the Ministry.

c) Market Opening And Market Monitoring

Being a part of the SONELGAZ group, the Société Algérienne de Production de l'Electricité (SPE) is in charge of electricity production whereas electricity transportation is-carried out by the Société Algérienne de Gestion du Réseau de Transport de l'Electricité. In total, the SONELGAZ group consists of 16 subordinated companies.

The electricity distribution is undertaken by two companies: The société Algérienne de distribution de l'électricité et du gaz and the société de distribution de l'électricité et du gaz d'Alger, the latter being a subsidiary of the former. Currently there is no specific timetable, or roadmap for market opening. The law has given CREG a general power according to which if



conditions are met then the regulator can propose a roadmap and an appropriate timetable for market opening. CREG does not cooperate with other authorities on issues related to competition. In principle, such tasks are undertaken by the competition authority. As market opening has not yet been implemented, CREG has no role regarding the prevention of abusive practices affecting wholesale energy markets and equally no role in detecting and investigating market manipulation practices.

d) Tariff Setting

The tariff methodology is fixed by executive decree. The CREG set the electricity transmission and distribution tariffs according to the aforementioned methodology. CREG is also involved in setting connection tariffs. As part of its ex-ante approval process, CREG evaluates data used for the calculation of tariffs according to the tariff methodology.

CREG has the power to require that transmission and distribution system operators to modify terms and conditions, tariffs, rules, mechanisms and methodologies to ensure they are cost reflective, and applied in a non-discriminatory manner and as set by the regulation.

e) Licensing

CREG issues licenses for new power plants and is also assigned with the competence to review and monitor the compliance of licensees with the license terms and conditions. On the occasion that a licensee is found to be in breach of the terms and conditions, CREG reports the case to the Ministry. Sanctions are imposed by the Ministry.

f) Dispute Settlement

An Arbitration Chamber is established within CREG. The Arbitration Chamber decides, at the request of the parties, on disputes that may arise between operators, excluding those related to contractual rights and obligations. It comprises: (i) three (3) members including the President and three (3) alternate members appointed by the Minister for Energy for a period of six (6) years renewable; and (ii) two (2) judges appointed by the Minister of Justice.

The chamber is competent to undertake any investigation and may need to appoint experts and call witnesses. It may also order provisional measures. The Arbitration Chamber deals with disputes between industry actors and also between industry and customers. Any affected party can bring up to the authority a complaint against a transmission or distribution system operator on issues related mostly to grid access and bills. The decisions of the Arbitration Chamber are not subject to appeal.

g) Unbundling

The Authority establishes guidelines on the unbundling of accounts and establishes rules regarding the allocation of costs resulting from the unbundling process. CREG has the power to proceed with an assessment as to whether sector participants are sufficiently unbundled and it can mandate changes in accounting practices CREG has also powers to draw up guidelines for compliance review and for reporting obligations regarding the unbundling process

h) Technical Competences

CREG has consultative powers to the Ministry and supports the ministry in regulations and procedures for operators. More specifically, CREG is entrusted with the following:

- achieving and controlling the distribution of gas by pipeline;
- engaging and consulting with public authorities for the organization and functioning of the electricity and gas market; and
- general supervision and monitoring compliance with laws and regulations relating thereto.

In more detail, CREG:

contributes to the development of the regulations



- formulates reasoned opinions and makes proposals;
- processes the applications and proposes to the Minister of Energy the granting of concessions;
- pre-approves the rules and procedures of operation of the system operator and market operator and the manager of the gas transport network;
- ensures conditions of neutrality of the manager of the gas transport network, the system operator and market operator in relation to other stakeholders;
- ensures the absence of dominance exercised by other actors on the management of the system operator and market operator;
- monitors and evaluates the performance of public service obligations;
- makes a prior decision on operations of corporate concentration, or acquisition of control
 of one or several electric companies, by another company that exercises the activities
 referred to in Article 1 above and in the context of legislation in effect;
- approves electricity transmission networks and gas development plans submitted by network managers and monitors implementation;
- processes applications and issues permits for the construction and operation of new facilities for generating electricity and transport including direct electricity lines and direct pipelines for gas, and monitors compliance with authorizations issued;
- investigates complaints and claims by operators, network users and clients; and
- holds all contracts on the purchase and sale of electricity and gas.
 - i) Consumer Protection

CREG is the authority responsible for consumer protection in the energy sector. They receive complaints and are responsible for the resolution of disputes between consumers and energy providers/operators. CREG has put in place mechanisms to support consumers in terms of the provision of information on their customer rights. At the same time they monitor the time taken by operators for the realization of new connections and repairs but it has neither the power to intervene nor to sanction the operators. CREG has no powers to address issues related to vulnerable customers. Such tasks are assigned to the Ministry.

7.2.4 Internal organization

The regulator can decide on its internal organization (except for the organization of the management committee). CREG can decide on its human resource policy (hiring and firing staff, deciding on staff allocation/ staff composition). There is no specific criteria/procedure related to the hiring of staff members such as e.g. official entrance exams as conducted by the central government. The Management Committee is the final decision-making authority for the selection of staff members.

Salary levels at CREG are similar to those of civil servants, government officials and industry personnel particularly in the energy sector. There is no legal restriction on the number of staff members. Currently, CREG has 76 members of staff, circa 42% of the budget is allocated to salaries and 0.3% is devoted to IT technology. No formal code of ethics binding to all staff members is in place.

7.2.5 Enforcement

The law has given CREG the power to sanction energy sector participants however this competence has not yet been implemented. CREG does not publish comparative reports demonstrating insufficient performance by network operators, does not apply a tariff incentive



regulation to sanction violations or inefficient performance of the operator and in practice has limited enforcing powers.

7.2.6 Transparency and Accountability

Information on the regulatory authority (its missions, duties, organization chart, reports) is made available on the CREG website (Arabic, French and English). General information on regulatory issues and practices such as licensing, tariffs, market monitoring data (except confidential data) and etc. can be found on the regulator's website. The authority has a defined communications strategy through press releases and its website. By law, CREG is not obliged to consult before taking final decisions. Decisions are taken by majority within the Executive Committee. To avoid deadlock in regulatory decisions, the President has a deciding vote. CREG issues an annual report. All reporting obligations of CREG concern reporting to the ministry of energy.

7.3 SERC (Bosnia and Herzegovina)

7.3.1 Legal status

The State Electricity Regulatory Commission (SERC) is an independent institution, which acts in accordance with the principles of objectivity, transparency and equality, and has jurisdiction over and responsibility for electricity transmission, transmission system operation and international trade in electricity, as well as generation, distribution and supply of electricity for customers in the Brčko District of Bosnia and Herzegovina. SERC was established by the Parliamentary Assembly of Bosnia and Herzegovina, with the adoption of the Law on Transmission of Electric Power, Regulator and System Operator of BIH in 2002, and by appointment of the Commissioners. SERC is a non-profit institution and is financed by regulatory fees, which are paid by the licensed entities.

7.3.2 Independence

a) Political & Legal Independence

SERC is a regulatory authority distinct and functionally independent from any other public or private entity and is autonomous from direct instructions from any government or other public or private entity when carrying out regulatory tasks, as laid out in article 2 of its Statutes. Establishment of SERC is solely based on legislation, meaning that it cannot be liquidated by act of another public institution. SERC consists of three Commissioners, two from the Federation of Bosnia and Herzegovina and one from Republika Srpska, reflecting the equal representation of the constituent peoples of Bosnia and Herzegovina, who then elect a Chairman annually from among the Commissioners.

While holding their positions in the regulatory authority, SERC's staff, including members of the Board, cannot have any direct or indirect work relationship or any contractual relationship with the entities involved in the regulated sectors or with other entities whose activities may conflict with the NRA's duties and responsibilities. They also cannot hold any shares or interests in the entities involved in the sectors regulated by SERC. There is no cooling-off period after the conclusion of Board or Staff members' service with SERC.

ObligationsGovernmentParliamentBudgetXAnnual Activities ReportX

Table 2: SERC Formal Obligations for Submission

b) Financial Independence

SERC has its own financial resources and is financed by license fees realized from its



duties/activities, in accordance with its financial plan, as laid out in Article 20 of its Statutes.

c) Functional Independence

SERC's decisions may only be appealed in the Courts. A party may appeal from SERCs final decisions by filing a judicial appeal with the Court of Bosnia and Herzegovina.

7.3.3 Competences

a) Information Access

The scope of SERC's responsibility and authority includes issuance of annual reports and other public information about SERC consistent with SERC rules and regulations. According to Article 12 of its Statutes, all final decisions shall be made in public sessions, except the decisions which are related to its internal organization.

b) Security & Quality of Supply

SERC monitors medium and long-term supply/demand balance on the national market, expected future demand and envisaged additional capacity and quality and level of maintenance of the networks and quality of supply. However, SERC does not participate in the implementation of measures to cover peak demand and to address any shortfalls of one or more suppliers, nor does it organize, monitor or control the tendering procedure for new capacity/infrastructure/investment.

c) Market Opening and Market Monitoring

The regulator prepared and adopted the decision on market opening, including the timeframe. The electricity market is fully open since January 1, 2015.

d) Tariff Setting

As laid out in SERC's Statutes (Article 6) and in the Law on Transmission of Electric Power, Regulator and System Operator of Bosnia and Herzegovina, the regulator has the power to approve, monitor and enforce tariffs and tariff methodologies for transmission and regulation of ancillary services. SERC issues rules and regulations establishing a tariff methodology, incorporating a number of principles.

SERC approves tariffs that meet the tariff methodology, in accordance with procedures and criteria set by SERC under its rules and regulations. Such procedures and criteria require the electricity transmission company, the ISO and other participants that may be regulated by SERC to prepare and submit to SERC for approval tariff schedules for every class of customer, consistent with SERC's tariff methodology. SERC establishes for the electricity transmission company the highest rates it may charge for connection to a network or for the transport of electricity, according to Article 4.8, paragraph 3, of the Law on Transmission of Electric Power, Regulator and System Operator of Bosnia and Herzegovina.

e) Licensing

According to Article 5 of its Statutes, SERC has the competence to issue, modify, suspend and revoke licenses, as well as monitor and enforce compliance with license requirements. By the Licensing Rule, SERC defined the procedures and criteria for granting of licenses, including the procedures for filing and review of applications and granting, suspension and revocation of licenses. In 2015, the Rules on amendments to the Licensing Rule were adopted.

f) Dispute Settlement

SERC is responsible for resolution of disputes among system users as set forth in further detail in SERC rules and regulations and other legal acts, consistent with its regulatory powers and applicable State laws.

g) Unbundling



The approval and monitoring of the unbundling of assets, divestiture and formation of the single company for transmission of electric power is included in the scope of powers of SERC.

h) Technical Competences

The regulator has the power to:

- set or approve rules regarding the management and allocation of interconnection capacity;
- issue secondary legislation, including market rules, grid codes and other such technical rules:
- · define metering rules and charges;
- approve operational and planning standards including schemes for the calculation of total transfer capacity;
- require that transmission and distribution operators correct any congestion difficulties;
- grant exemption/s for third party access for new investment;
- set/approve/provide an opinion on quality of service standards and congestion management rules/standards;
- approve development plan;

Also, the regulatory authority maintains an audited account of revenues collected pursuant to congestion management mechanisms.

i) Consumer Protection

Concerning consumer protection in the energy sector, SERC jurisdiction and authority includes consumer protection to ensure fair and non-discriminatory treatment, receipt of high-quality services, competition and the prevention of anti-competitive activity.

7.3.4 Internal organization

The work of SERC is organized within four departments:

- Tariff and market department
- Licensing and engineering department
- Finance and administrative department
- Legal department

Each organizational unit has specific functions as provided in SERC's Statutes. In addition to, or as a replacement for, these organizational units, the Commissioners may designate other permanent or temporary organizational units in order to better carry out the SERC's activities.

7.3.5 Enforcement

SERC does not have sanction powers over the regulated sector, although it does have powers, in a way, to constrain the regulated parties.

7.3.6 Transparency and Accountability

SERC publishes its budget and annual business report annually and strives to assure that its acts are easily accessible by the public for review. SERC can issue special publications, newsletters, bulletins and create a web page with the purpose of informing the public on its work. Also, SERC may seek informal public input during the development of draft rules and regulations and gives prompt formal public notice of the opportunity for public comment on draft



rules prior to adopting final rules.

7.4 HERA (Croatia)

7.4.1 Legal status

The Croatian Energy Regulatory Agency (HERA) is an independent, public and no-profit organization set up in order to establish and implement the regulation of energy activities³. HERA was created in 2004 by an Act on the regulation of energy activities (Official Gazette n. 177/04).

HERA has the legal authority to preside over the regulation of electricity, natural gas, oil and oil derivatives and thermal energy. HERA's activities should be performed in the interest of the Republic of Croatia and in accordance with the application of the principles of transparency, objectivity and impartiality.

While, HERA is the only responsible entity for regulating the Croatian energy sector, it has the obligation to hold public consultations when defining tariff methodologies.

7.4.2 Independence

a) Political and legal independence

HERA is distinct and functionally independent from other public and private entities and does not receive instructions from the Government or other entities when performing its functions.

HERA's Statute defines the organizational framework for the regulator's operations and activities. The Statute was originally conceived in 2008 (Official Gazette, Nos. 99/07 and 137/08) and updated in 2013 (Class: 011-01/13-01/05, Reg: 371-01/13-14) following a governmental act on the regulation of energy activities (Official Gazette, No. 120/12). According to its Statute, HERA's decision-making process and professional environment should be built around the principles of transparency and efficiency.

HERA is managed by a Board of Commissioners. HERA's Board consists of five members, including the President, who manages the Board. The members of the Board of Commissioners are appointed by the Croatian Parliament upon proposal of the Government of the Republic of Croatia for a term of seven years with the possibility of one reappointment. The Government proposal is based on a public call of interest. The call should present the eligibility criteria for the post of Commissioner and President as well as specify the documents to be submitted and the deadline to apply. Within 30 days from the deadline, the Government selects the names for the President and Commissioners from a certified list of eligible candidates and proposes them to the Parliament for approval.

³ The legislative framework for the performance of HERA's activities comprises the following regulations: Regulation of Energy Activities Act (Official Gazette, No. 120/12); Energy Act (Official Gazette, No. 120/12); Electricity Market Act (Official Gazette, Nos. 177/04, 76/07, 152/08, 14/11, 59/12); Electricity Market Act (Official Gazette, No. 22/13); Gas Market Act (Official Gazette, Nos. 40/07, 152/08, 83/09, 114/11); Gas Market Act (Official Gazette, No. 28/13); Thermal Energy Production, Distribution and Supply Act (Official Gazette, Nos. 42/05 and 20/10); Thermal Energy Market Act (Official Gazette, No. 80/13); Oil and Oil Derivative Market Act (Official Gazette, Nos. 57/06, 18/11 and 144/12); Biofuels for Transportation Act (Official Gazette, Nos. 65/09, 145/10, 26/11 and 144/12); Energy Community Treaty Ratification Act (Official Gazette – International Agreements, Nos. 6/06 and 9/06); General Administrative Procedures Act (Official Gazette, No. 47/09); Ordinance on licences for performing energy activities (Official Gazette, Nos. 118/07 and 107/09); Decision on the amounts of fees for the regulation of energy activities (Official Gazette, Nos. 155/08, 50/09, 103/09 and 21/12); Regulation on the validity period for licences for performing energy activities (Official Gazette, No. 50/09 and 105/09).



Staff members are selected through public and transparent calls.

HERA comprises five divisions providing expert, administrative and technical services:

- Electricity;
- · Gas and oil;
- Thermal energy;
- Legal affairs and human resources;
- Support services.

These divisions are managed by Directors, who are in charge of all the professional aspects related to the regulation of the sector. Directors are nominated by the President of the Board according to standard public tender procedures. They remain in charge for four years, with the possibility of being reappointed. They report directly to the President of the Board of Commissioners.

To avoid conflict of interest, HERA enforced a rule that prevents members of the Board from having employment relationships with regulated entities while holding their positions at the regulator. Members of the Board and their families are required not to own or hold shares or stakes in any energy undertaking for more 0.5% of the capital stock. Additionally, members of the Board should not have any form of direct or indirect contractual relationship with entities active in the sectors regulated by HERA. Finally, they cannot be active members of any political party.

Failure to comply with these provisions may lead to the opening of an investigation led by the Croatian Government, which can propose the dismissal of one of multiple members of the Board to the Croatian Parliament. Additional reasons that may lead to the dismissal of a Board member include the inability to properly perform his/her duties for a period exceeding six months, the permanent loss of the ability to perform his/her role, the breach of the duties listed in HERA's Statute and the final judgement from law court for a criminal offence. The dismissal of a Board member happened once in the past.

Members of the Board should respect a cooling-off period one year after having left their position at HERA. During that time, they cannot perform any work in energy undertakings to which the Acts on the regulation of energy activities apply. All Board Members are professionals and cannot have outside employment.

Obligations	Government	Parliament
Reports on financial operations	Х	
Annual activities report		Х

Table 3: HERA Formal obligations for approval

At the request of the Government, HERA has to submit reports on technical and financial operations under its scope of action. The regulator also presents its annual report to the Parliament, focusing on:

- results of its monitoring of compliance of energy activities with the obligations specified in the Regulation of Energy Activities Act and in the other energy provisions;
- budgetary performance of the regulator;
- analysis of the energy sector and development of the energy market;
- compliance with EU and ACER's legally binding decisions.
- b) Financial independence

Pursuant to the Decision of the Government of the Republic of Croatia on the amount of fees to perform the regulation of energy activities (Official Gazette, Nos. 155/08, 50/09, 103/09 and



21/12), HERA's operations are financed by funds deriving from the following sources:

- a fee amounting to 0.05% of the total annual income from the sale of goods and/or services generated in the previous year by energy entities involved in energy activities conducted through licenses;
- one-off payments for HERA's operations, i.e., fees for issuing licenses for performing energy activities, for acquiring eligible producer status and for the settlement of claims, complaints and requests.

Fees are defined by the law.

The regulator controls the use of its financial resources and does not have to seek approval for its budget, but since January 2017 HERA has to plan its budget within the overall state budget. HERA has to hire independent auditors to audit its financial reports on the annual basis

HERA needs the approval of the Government to acquire or dispose of real estate or any other property, accept legacies and enter into any legal transaction exceeding one half of the regulator's budget.

c) Functional independence

All decisions taken by the regulator are binding. However, energy entities can appeal to HERA's decision can be appealed to Administrative Courts. Additionally, they can appeal to the Ministry of Economy against the regulator's decisions concerning denial, revocation or transfer of energy licenses.

7.4.3 Competences

a) Information access

The law provides the regulator with the right to fully access technical and financial information from energy sector participants and allow for the proper monitoring of utilities. HERA maintains an updated database to store collected data.

b) Security and quality of supply

HERA monitors the medium and long-term supply/demand balance of the Croatian electricity markets, but HERA does not monitors the medium and long-term supply/demand balance of the gas market. It also oversees expected future demand for energy and the technical capacity necessary to meet that demand. The regulator does not participate in the implementation of measures to cover peak demand or address suppliers' shortfalls and is not responsible for controlling tendering procedures for new infrastructure investments. In the gas sector, HERA evaluates and analyzes submitted investments and conduct public consultation and approves the 10-YNPD plan submitted by the TSO. Within tariff application for the regulatory period, DSO submits planned investments. HERA evaluates, analyzes and approves the DSOs planned investments within tariff approves. Planned investments in the construction and reconstruction of the transmission/distribution system approved by HERA must be technically reasonable and cost-effective and must also ensure an adequate level of secured gas supply.

c) Market opening and market monitoring

The electricity market has been fully open to all customers as of 2008, though the former vertically integrated utility, Hrvatska elektroprivreda HEP, via its daughter companies, is the most influential supplier of electricity in the country and the most significant importer of electricity.

The electricity wholesale market model is mostly based on bilateral contracts. In February 2016 Croatian power exchange CROPEX was established, with organizing day-ahead auctions. In April 2017 CROPEX organized its first intraday auction.

Croatia entered the inter-TSO compensation mechanism in 2008, eliminating transit fees. HERA



approves rules for allocation and usage of cross-border capacities. Currently, JAO is responsible for organizing yearly, monthly and daily auctions on Croatian borders with Hungary and Slovenia, and SEE CAO for organizing yearly, monthly and daily auctions on Croatian border with Bosnia and Herzegovina. Furthermore, intraday joint bilateral auctions are done on Croatian borders with Slovenia and Bosnia and Herzegovina. In addition to that, joint bilateral auctions are organized on Croatian border with Serbia for yearly, monthly, daily and intraday timeframes.

The gas sector is unbundled and the market open by the Gas market act as of 1st August 2008, meaning that all customers are deemed eligible and can freely choose a supplier and negotiate a price, though in practice, as with electricity, one entity dominates the market.

HERA played an advisory role to the Ministry for the definition of the national timetable to open electricity and gas markets to competition. HERA is tasked with monitoring and detecting abusive practices in the wholesale markets and collect regular information on market dominance and anti-competitive behaviors. Since 2006, the Croatian Competition Agency and HERA entered into a cooperation agreement. The regulators exchange experts' opinions in order to further competition in the energy sector.

d) Tariff setting

HERA enacts the methodology for calculating the amount of tariff items for electricity transmission and distribution networks and defines the amount of the tariff items based on those methodologies. It adopts the amount of tariff items for transmission and distribution and to access cross-border infrastructures. Additionally, HERA adopts and approves methodologies for the provision of balancing and ancillary services.

In the gas sector, the regulator HERA can include performance-based components in the tariff methodologies and can penalize non-performing utilities by proposing to reduce their tariffs for the following regulatory period. The TSO provides TPA to the network on a regulated basis. HERA may grant TPA exemptions limited to new investment consistent with best practices.

As part of its ex-ante setting process, HERA follows a transparent and inclusive process when adopting general rules and decisions. The process involves full consultation with operators and the associations representing interested parties (consumers, environmental, trade unions, and business associations). This process is performed by circulating documents and collecting of written observations, which are then discussed during collective and individual hearings prior to issuing any provisions. These hearings are governed by specific regulations which include the possibility for the associations to bring specific and urgent questions to the regulator's attention and propose that these be included in the agenda of the hearing for discussion.

e) Licensing

Licensing requirements in Croatia are consistent with the general practice within the EU Member States, requiring licenses at each stage of the chain from generation to supply, i.e., separate licenses for the TSO, DSO, market operator, generation and supply.

HERA issues licenses, and may temporary or permanently revoke the license for carrying out energy activities. HERA also has the authority to order the transfer of plants, facilities, appliances, networks or systems to another energy undertaking to operate them, in the case of an energy undertaking whose license was cancelled or who stopped performing an energy activity and provided that the license was not cancelled on the ground of safety failures on such plants, facilities, networks or systems.

In the case of authorizations of new generating capacity, the Ministry of Environment and Energy provides approval for construction of generating facilities (for production of electricity). On its part, HERA gives an opinion to the Ministry on the procedures and criteria for approval and construction. In the interest of security of supply, the Ministry can propose the construction of new generating capacity to the Government. HERA is required to give its opinion on the aforementioned proposal.



f) Dispute settlement

HERA is responsible for settling disputes between industry actors as well as industry actors and consumers. HERA resolves grid access, third party access and cross-border complaints, subject to judicial review. Most complaints concern the conditions to access the grid.

g) Unbundling

Croatia has opted for the independent transmission operator (ITO) model for the electricity TSO which is a part of a vertically integrated energy entity and needs to be organized in an independent legal entity and independently of other activities in the electricity and gas sectors. For the gas sector, TSO (PLINACRO) is organized by the ownership unbundling model, but the certification process is still on going.

That part is not just in accordance with unbundling, but for all energy utilities which carry out more than one energy activity – separate accounting is proscribed by the Directives

h) Technical competences

HERA has the power to define metering rules and charges, approve operational and planning standards including schemes for the allocation of the total transfer capacity, and require that transmission and distribution operators correct congestion difficulties and, in the gas sector, grant exemptions for third party access for new investments.

HERA approves above mentioned exemptions for new infrastructures. The decision on the exemption for the new structure facility is made by HERA, whereby HERA is obligated to submit the same reasoned decision to the European Commission. The decision is enforceable following the receipt of the European Commission s decision.

The regulator approves standards on the quality of service and can set penalties in case energy companies do not respect them.

i) Consumer protection

Together with other relevant authorities, HERA is tasked with the application of comprehensive customer protection measures, for example including:

- assessing complaints, appeals and reports from consumers, individuals or associations;
- monitoring the respect of quality and tariff standards by service providers;
- intervening on service providers when service regulations are not respected to make them modify their behavior;
- ensuring that measures adopted by energy providers are adequate to ensure equality of treatment for all consumers;
- periodically checking the quality and efficiency of the services to ensure they run smoothly, also by surveying the opinions of the users;
- guaranteeing transparency and completeness of information to consumers on energy services;
- ensuring prompt response to complaints, claims and reports regarding quality and tariff standards.

As most EU regulators, HERA does not have the direct power to address vulnerable consumers' issues, which are managed through the country's social policy. Specifically, Croatia has a Centre for Social Welfare that is in charge of applying economic and non-economic support measures to vulnerable consumers.

7.4.4 Internal organization

HERA can autonomously decide on its human resources policy based on internal regulations,



which include a binding code of ethics. The recruitment of staff is the result of an open competition and is performed by an independent selection panel. The terms and conditions of recruitment for HERA's employees do not correspond to those of civil servants, but can be referred to general labor regulations.

In line with this responsibility, HERA's Board has the authority to set and remove penalties and incentives for staff members. Staff salaries (that includes also Board members' salaries) are set by an internal act. There is no legal restriction to the number of employees that the regulator can hire.

In 2016, HERA's staff consisted of 68 staff members, including 4 Board Members, 7 employees in the office of the President of the Board, 12 employees in the Electricity Division, 14 employees in the Gas and oil Division, 6employees in the Thermal energy Division, 13 employees in the Legal and human resources Division, and 12 employees in the Support services.

HERA's budget for 2016 was €3.000.000, 54% of which was devoted to salaries. This corresponds to a budget of 1,45€ per consumer for the electricity sector or to 875€/MW of installed capacity. HERA considers this budget is sufficient to properly perform its mission.

7.4.5 Enforcement

The 2012 Act on the regulation of energy activities tasks HERA with the power to sanction sector participants that breach energy regulations. The regulator can reduce rates of return or revise tariffs to in response to such violations, an example being the permanent revoking of licenses from some market operators.

The law does not envisages other forms of enforcement and HERA does not publish comparative reports on the performance of network regulators.

The Board of Commissioners takes decisions by simple majority, with each member expressing one vote.

7.4.6 Transparency and accountability

HERA maintains regular contacts with all market stakeholders. It provides them with updated information on the regulator and on decisions taken, including licensing, tariffs and data on market monitoring. There are however rules to avoid the disclosure of confidential data.

HERA encourages the participation of stakeholders to the regulatory process through public hearings, written consultations and workshops. HERA implements a regular consultation process in secondary legislation issuing process. All decisions taken by HERA's Board of Commissioners are published on the regulator's website, although they are not available in English.

HERA issues an annual report and has a reporting obligation towards the Croatian Parliament. The regulator appears annually before the Parliament and the relevant Parliamentary Committees.

7.5 CERA (Cyprus)

7.5.1 Legal status

The Cyprus Energy Regulatory Authority (CERA) is the National Energy Regulatory Authority of the Republic of Cyprus. It is established and organized by Law 122 (I) 2003, as amended and complemented applies, for the purposes of harmonization of the Cyprus internal legislation with the Directive 96/92/EEC of the European Parliament and Council of the 19th of December 1996 and its subsequent amendments by the European Directives 2009/72/EC and 2009/73/EC



regarding the liberalization of the electricity market and common rules for the internal electricity market in the European Union.

The operations of CERA are controlled by Regulations, which are issued in accordance with the authorizations of the above L. N.122 (I) 2003 and the Directives of the Electricity Market Law. The above Regulations determine, among other, the procedures for the issue of CERA's decisions.

The main objective of CERA is to ensure the smooth operation of the energy market in Cyprus in the fields of electricity, natural gas and renewable energy sources. The finding of natural gas deposits in Cyprus' Exclusive Economic Zone (EEZ), makes the role of CERA more important. CERA is assisted by the CERA Office, which is an independent to CERA legal entity, also provided by the Law N.122 (I) 2003.

7.5.2 Independence

CERA is legally and functionally independent of any other public or private entity. It may take autonomous decisions independently of any political organization and has budgetary autonomy and sufficient human and financial resources. CERA has the authority to appoint the personnel of the CERA Office who are deemed necessary to accomplish its duties.

In particular:

a) Political and legal independence

CERA consists of three (3) Members appointed by the Council of Ministers of the Republic of Cyprus after consultation with the Parliamentary Committee on European Affairs. The Council of Ministers appoints one of the members as the President and another member as the Vice President of CERA. All members of CERA give oral reassurance to the President of the Republic of Cyprus for the due execution of their duties.

All members of CERA are persons of high moral and professional standards and are bound, in the exercise of their duties, by the provisions of the internal legislation and are obliged to comply with the principles of independence and impartiality and act independently of any economic and political interest. Specific provisions of L. 122 (I) 2003 clearly foresee that members of the CERA shall neither seek nor accept direct instructions from the government or administrative bodies or from any other person or agency, for the exercise of their duties and competencies.

Also, the members of CERA may not be employed or in other way maintain positions in the administrative, municipal and public sector, the Electricity Authority and companies under its supervision, as well as employment in the private sector. Failure of a members to comply to these provisions may result to the dismissal of its duties, following a decision of the Council of Ministers, where such decision is communicated to the Representatives' Parliament of the Republic of Cyprus.

Moreover, for a period of two (2) years after expiry, dismissal or in any way termination of their term of office, all Members of CERA shall abstain from any counselling position, as per the Law of 2007 regarding the Control of Employment in the Private Sector by prior State Officers and Employees of the Public and wide Public Sector, or they may be subject to penal sanctions.

Furthermore, the members of CERA and the members of the CERA Office do not have personal liability in civil matters, relating to their actions, omissions, opinions, reports or other documents they prepared during the execution of their duties and competencies, as long as they complied and acted in good faith, pursuant to the above L. 122 (I) 2003 and the Regulations and Decrees executed thereto.

CERA is accountable for the performance of the duties, powers and competencies both of CERA and the CERA Office, to the President of the Republic of Cyprus and for this purpose submits to the latter a Report for each calendar year, within 6 months, at the latest, after the



termination of the above year.

b) Financial independence

The financial independence of CERA, which is an essential condition in order to preserve its independence, was effectively ensured by the provisions of the relevant legislation, through which it is anticipated that for the execution of its operations CERA possesses adequate financial resources, mainly through License fees, as well as the competence to execute its own budget.

The annual budget for CERA and CERA Office for the fulfilment of their financial program, is submitted by CERA to the Ministry of Councils until the 1st July of each year to be approved by the above Council and the Representatives' Parliament. CERA keeps the proper financial records and accounts for CERA and the CERA Office activities and drafts a respective review, all inspected by the Auditor General of the Republic of Cyprus. CERA does not own its premises. CERA's registered seat and offices are located in Nicosia, in two rented floors.

c) Functional independence

Decisions, decrees and administrative penalties, issued or imposed by CERA by virtue of the above L. 122 (I) 2003 and the Regulations and Decrees executed thereto, including decision for granting, amending and revoking Licenses may be challenged before the Supreme Court, by all interested parties, pursuant to article 146 of the Constitution and the relevant jurisprudence. Also, the CERA Office is liable for civil matters and may prosecute and be prosecuted and be a judicial party to any judicial procedure related to the execution of the duties, competencies, powers and activities of CERA and the CERA Office. The CERA Office may be legally represented by a practicing lawyer and or a member of its personnel of the CERA Office.

7.5.3 Competences

CERA has a wide range of duties, responsibilities, competences and authorities, aiming to promote its general objectives, such as ensuring effective competition in the Electricity Market, protecting the interests of consumers and ensuring the security, continuity, quality and reliability of electricity supply and in brief:

a) Information Access

CERA may demand any information, document or other material by the License holders that is reasonably considered as necessary for the conduct of its powers and competencies. The regulator may also, on its own initiative or further to a relevant complaint, conduct investigations for the activities and operation of the supervised legal entities, pursuant to the provisions of the respective legislation.

b) Security and Quality of Supply

CERA monitors the security of energy supply, especially with regard to the balance between supply and demand on the energy market, anticipated future demand, anticipated additional electricity and natural gas production, transmission and distribution potential already programmed or under construction, the standard and level of maintenance and reliability of transmission and distribution systems and the application of measures to cover peak demand and conditions on the energy market in terms of the facility to develop new production potential and takes all legal measures for the above targets. For the above purposes, CERA may take all legal measures, including the drafting and application of the long-term schedule, which is published on CERA's website.

c) Market Opening and Market Monitoring

CERA monitors the operation of all sectors of the energy market (Electricity, Natural Gas, Renewable Energy Sources, Co-generation of Electricity and Heat etc.). For this purpose, CERA is competent for collection and processing of information from companies in the energy sector while respecting the principles of confidentiality.



CERA monitors the efficiency of the wholesale and retail market, as well as the competition development in the wholesale and retail market, including cross border transactions, the prices for household customers, the switching percentage and procedures, disconnections, quality of services regarding the supply and maintenance services, customers; complaints, as well as any distortion or limitation in competition.

CERA also ensures the implementation of proper mechanisms for the inspection and transparence, efficient competition and operation of the energy market, so as to avoid abuse of dominant position, predatory and anti-competitive and aggressive behavior against consumers. For the fulfilment of the above activities, CERA may cooperate with the Competition Authority.

d) Tariff Setting

CERA determines and or approves at least the following methodologies for:

- Connection and access to national networks, including the charges for transmission and distribution, taking into account the effectiveness of necessary investments on the infrastructure.
- Ancillary services
- Access to cross border infrastructure, including the capacity allocation and congestion management.

The above methodologies are published.

e) Licensing

According to section VI of the L. 122 (I) 2003, CERA is competent for the granting, amendment or revoke of licenses for energy-related activities, pursuant to the principles of transparency and equal treatment and taking account of the specific attributes of applicants, consumer protection, environmental protection and the need to safeguard healthy competition, security of supply, energy efficiency, protection of the environment, public interest, public health and security. CERA also monitors whether license holders comply with their obligations under the terms of the licenses and may impose administrative sanctions for any violation as provided by the respective legislation.

f) Dispute Settlement

CERA, by acting as a Dispute Resolution Authority, may decide on any complaint against Transmission System Operator and Distribution System Operator, within two (2) months of the relevant complaint. The above period may be extended for two (2) additional months, further to the agreement of the claimant. The Decision is fully binding to the parties, if and until it is annulled. CERA is also competent for the extra judicial settlement of the disputes between consumers and License holders, pursuant to the provisions of the above L. 122 (I) 2003.

g) Unbundling

Cyprus according to article 44 (derogations) of the 2009/72/EC directive has obtained an exemption from article 9 on Unbundling of Transmission Systems.

Under current legislation, the Transmission System Operator which is legally unbundled, acts independently from production, distribution and supply activities in order to safeguard third party access onto the transmission network and equal treatment of all users of the network.

Currently the Cyprus TSO is located separately from the Electricity Authority of Cyprus. The Transmission System Operator presents himself to customers as a separate entity with his own name, logo and website. Cyprus TSO is provided with all of its employees by the single vertically integrated utility, namely the Electricity Authority of Cyprus.

h) Technical Competences

CERA is competent to monitor the performance of the Transmission System Operator and the Distribution System Operator and their compliance to the European regulation 714/2009 and the



technical rules and standards of the Directive 98/34 (EC). The regulator is also competent to approve the investment program of the Transmission System Operator and to monitor its implementation and, by virtue of its respective annual report, evaluate the above program, pursuant to the provisions of the European Regulation 714/2009 and consider and decide on amendments to the respective development plans. CERA also monitors the time needed for the Transmission System and Distribution System Operators to connect users, effect repairs and provide services to system users.

i) Consumer protection

CERA ensures a high level of consumer protection, especially in relation to the contractual terms and conditions for the provision of energy, access to information and dispute resolution mechanisms, protection of vulnerable customers, switching. The regulator also consults with the competent Minister for the provision of Public Service Obligations to the consumers.

7.5.4 Internal organization

Administrative and technical support is provided to CERA by the CERA Office. The CERA Office is a legal entity independent to CERA. It is divided in the following directorates: Financial Services, Legal Services, Administrative Services, Electricity and Renewable Sources of Energy, natural gas, International Relations and Energy Policy, Markets and Competition Monitoring.

CERA Office is headed, inspected and supervised by CERA. CERA Office personnel is employed and operates according to the directions of CERA. Special regulation provides for their duties, employment, promotions, tasks and offices, Code of Ethics/ Disciplinary procedures exercised by CERA.

As of November, 2017, the staff consists of 19 members (excluding Board Members), including 3 Senior Energy Officers, 10 Energy Officers and 6 members of the administrative support.

7.5.5 Enforcement

CERA is competent to issue regulatory decisions, to impose administrative fines and sanctions to the supervised entities, which do not comply to their obligations, pursuant to the L. 122 (I) 2003, the regulatory and binding decisions of CERA, issued further to the provisions of the above law, as well as to propose such sanctions to the competent court. Within this framework, CERA may impose or propose fines up to 10% of the annual turnover of the TsO or up to 10% of the annual turnover of the vertically integrated company to the vertically integrated company.

7.5.6 Transparency and Accountability

By virtue of its Annual Report, which is published on its website, CERA presents the performance of its competencies and duties, provided by the relevant legislation. CERA's website is currently updated with the existing energy legislation, its internal organization, actions and activities on all supervised energy fields, as well as the relevant regulatory decisions.

Moreover, by virtue of the public consultations, CERA is giving the opportunity to interested parties to formulate an opinion and submit their comments on important issues of the energy market, as well as proposed regulatory measures. CERA also communicates current developments of the energy sector and presents its activities in conferences, congresses and other events, which raise awareness on its work in the energy sector.



7.6 EgyptERA (Egypt)

7.6.1 Legal status

The Electric Utility and Consumer Protection Regulatory Agency (EgyptERA) ⁴ was established in 2000 by virtue of the Presidential Decree No. 339. By virtue of the Law 87/2015, EgyptERA was restructured to become an independent institutional entity in charge of handling and developing activities between electricity producers, transmission operators, distribution companies and end users. The above Law specifies the powers and missions, the decision-making process and the provisions regarding transparency, independence and impartiality of the regulator.

Over the past decade EGYPTERA and its predecessor (EEUCPRA) have been actively involved in several international and regional programmes. Currently EgyptERA's under the TWINNING project funded by the European Union "Strengthening the Institutional Capacity of the Egyptian Electric Utility and Consumer Protection Agency (EGYPTERA)" No. EG/13/ENP/EY/19. This project is led by the Greek and Italian Regulatory Authorities (RAE and AEEGSI, respectively) and has offered to EgyptERA significant contribution and assistance in the process of implementing market reform, as well as in being an independent, well-functioning, reliable and efficient Regulatory Authority performing according to European best practices.

7.6.2 Independence

The new legal framework provided by L. 87/2015 can be considered as an important step towards full independence of EgyptERA as its missions, powers and autonomy were strengthened.

a) Political and legal independence

The Members of the Board (including the Chairman) are appointed by the Prime Minister for a three-year term, renewable for only one similar term. The Board consists of the Chairman, who is the competent Minister, as well as the board members, from various sectors of the Electricity Market and the competent Ministry, as follows:

- 1. The Chief Executive Officer,
- 2. Four members representing the Consumers, as follows:
 - Chairman of the Competition Protection and Anti-Monopolistic Practices Agency or a nominee from his board of directors.
 - Chairman of the Consumer Protection Agency or a nominee from his board of directors.
 - Chairman of the Egyptian Industries Union or a nominee from his board of directors.
 - Chairman of the Chambers of Commerce Federation or a nominee from his board of directors.
- 3. Three representatives from the Electricity Utility to be nominated by the Competent Minister.

⁴ Information not provided by the Law 87/2015 was retrieved by the "Compliance Assessment of the Regulatory Agency for the Egyptian Electric Utility and Consumer Protection (EgyptERA)" Report Med16_INS_PRT_V5 28 June 2016, as well as from the relevant Reports and Deliverables of the TWINNING Project "Strengthening the Institutional Capacity of the Egyptian Electric Utility and Consumer Protection Agency (EGYPTERA)" No. EG/13/ENP/EY/19.



4. Four persons of expertise in the technical, financial and legal areas, and other representatives of the Civil Society Organizations who are not Electricity Utility Stakeholders. The Chief Executive Officer represents the Agency before court and in its relations with third parties. The rules regarding the terms of office of Board members are clearly defined and ensure a proper rotation of members.

By virtue of the Code of Ethics, which has been recently submitted to EyptERA's Board for adoption⁵, there are special provisions, among others, for the Officers' impartiality and confidentiality, as well as for the prevention of conflict of interest for the members of the Board and officers of EgyptERA. In brief, according to the above Code, the officers and the members of the Board may not have relationships nor be placed in situations in whose context their personal, labour, economic or financial interests can enter in conflict with the fulfilment of their functional duties in the Regulatory Authority.

Officers are not permitted to carry out any professional activities outside the scope of their functions with exception that of teaching. They are also not permitted to have direct or indirect professional relationships with directors, receivers or management personnel of licensees regulated by EgyptERA, or maintain connections from which they can derive benefits, rights or obligations in relation to these licensees.

For the officers that perform functions as Director or Head of Division, the above provisions apply also for a period of one year after they leave EgyptERA. For the members of the Board, this period shall be two years. Also by virtue of the L. 106/2013 for the Prohibition of conflict of interests for the high level decision makers in the government, general provisions are established to avoid conflicts of interest for high-level decision makers in the government, however there are not yet specific provisions for the energy sector.

b) Financial independence

EgyptERA has mixed financial resources, which comprise of: The funds allocated to EgyptERA in the public budget of State, licensing and permit fees, fees for services provided to energy stakeholders, return on EgyptERA's savings accounts, donations and grants from international organizations/agencies. The regulator has separate budget to be prepared and approved by the Parliament via the general budgetary process for the Stare Budget. All EgyptERA's funds are deposited with the unified treasury account of the Central Bank, provided that the EgyptERA keeps 25% of the annually realised surplus and carry same forward from year to another. The regulator is autonomous in the use of its budget. Expenditures are revised by a separate entity, the Accountability State Authority.

Regarding human resources, there are clear recruitment procedures determined by the Law regarding civil servants that are applicable to EgyptERA. The regulator has the possibility to hire consultants for a period identified by EgyptERA depending on its needs. This period can be extended. With the new Electricity Law, EgyptERA can recruit its own staff and does not need the approval of another governmental body even though consultation with the Ministry of finance is still required. EgyptERA does not own its premises. Her offices are seated in three rented floors in a building owned by a governmental body.

c) Functional independence

EgyptERA executes its powers, tasks and competencies by virtue of decisions, regulatory decision and imposition of penalties and administrative sanctions to the supervised entities. The regulator submits to the Prime Minister, within three months from the expiry date of the fiscal

⁵As at the time of the finalization of the present Report, a new law was issued in Egypt providing for the Code of Ethics of civil servants, no further elaboration could be effected both on the application field as well as the specific provisions.



year, an annual report on its activities performed during the year and the developments achieved in the Electricity Market.

7.6.3 Competences

EgyptERA has the mission to regulate the Egyptian electricity market in a transparent and nondiscriminatory manner, while considering environmental measures and ensuring availability, reliability and quality of supply at fair prices.

In brief:

a) Tariff setting

The tariff methodology, including both network tariffs, end-user tariffs for domestic customers and tariffs for renewable energy sources installations, is set by EgyptERA and approved by the Cabinet of Ministers. The approval of tariffs is divided into two phases. First, the Cabinet of Ministers approve the tariff methodology. Then, EgyptERA autonomously performs the calculation of tariffs.

By virtue of the L. 87/2015, especially regarding electricity supply by the Distribution Companies to non-eligible customers, in case the Cabinet determines a tariff that is less in value than the tariff adopted by EgyptERA, the State shall pay the difference between the two tariffs to the licensees, in accordance with the rules and procedures set forth in the Executive Regulations, executed by the provisions of the above Law. Vulnerable consumers are subsidised in as much as a progressive tariff structure applies, i.e., low-consumption consumers pay proportionally less then high-consumption consumers.

b) Network rules and standards

EgyptERA approves network connection and network access contracts. The L. 87/2015 does not include provisions and respective competencies for EgyptERA to approve and adopt cross border capacity allocation rules.

c) Market monitoring

EgyptERA is responsible for market monitoring. In particular, EgyptERA is entitled to approve Market Rules and to launch reparatory measures and amendments when required. Taking into consideration that in the Egyptian electricity sector the liberalisation process has just started, the market monitoring activity is currently mainly devoted to assessing the existence of the required conditions to allow market opening, with particular reference to competition on the supply side of the market. To the specific task, which entails the transposition from a vertically integrated monopoly to competition, EgyptERA is being assisted by the above Twinning Project, carried out by RAE and AEEGSI, the Greek and Italian Regulatory Authorities, respectively. EgyptERA also observes the compliance of the Licensees to the terms and conditions of their Licences.

d) Licensing

Under L. 87/2015, EgyptERA is competent to grant all permissions and licenses to establish, manage, operate and maintain electricity production, distribution and supply/ sale activities.

Under the above Twinning Project, the Licensing Regulation and Procedures were developed, regarding the Generation (conventional plants, RES, Cogeneration), Distribution and Supply activities.

e) Access to information

The L. 87/2015 provides EgyptERA with access to all necessary information of the regulated entities.

f) Consumer protection

Electricity consumer protection is mainly performed through a complaint management system



and initiatives aimed at increasing consumer awareness. In particular, in regard to complaints EgyptERA has an electronic system for recording complaints and follow-up on its procedures. Concerning consumer awareness, EgyptERA makes intensive use of the available information technology (e.g., website, social media, mass communication channels) to promote awareness campaigns. The Consumer Protection Agency may be considered that it is indirectly involved in the making of EgyptERA, as the Board consists, among others, of the Chairmen of consumer organizations' representatives, especially the Consumer Protection Agency.

Articles 35-40 of the law 87/2015 establish dispute settlement provisions and a specific procedure has been adopted through the respective Executive Regulations. However, this procedure is targeted to be amended and enriched, according to the EU best practices, further to the implementation of the proposal of a Dispute Resolution Procedure, that has been prepared by virtue of the above Twinning Project. Nevertheless, consumers and other stakeholders should be involved in all phases of the decision-making process through public consultation on draft documents.

(g) Utility unbundling

The unbundling regime is set out by the Electricity Law and each utility is tasked to implement it. EgyptERA is involved in the different phases of the unbundling process, from designing to the ex-post monitoring of the process.

7.6.4 Internal organization

The main structure scheme of the organization of EgyptERA, as provided by L. 87/2015, is decided by EgyptERA's Board of Directors. Recruitment procedures are being performed by EgyptERA, following procedures applied by the overall Egyptian governmental structures. The internal mobility which EgyptERA offers to its employees is also a valuable indicator for a good level of human resources management and may support the professional and personnel development of staff members, whose cross-cutting experiences enrich their skills.

EgyptERA does not currently apply a code of conduct for its staff and reports to rely on generic principles of work ethics. These principles are enforced through EgyptERA's legal affairs department, which investigates employees in case of breach of rules. The results are presented to the Board of Directors in order for them to judge and decide the potential measures to be applied. However, the Board of Directors gave mandate to draft an internal code of conduct, as mentioned above, which should be approved by 2017.

7.6.5 Enforcement

EgyptERA, by virtue of the L. 87/2015 is empowered to enforce its decisions, regulatory measures, as well as to impose sanctions to supervised entities, especially Licensees, in case they do not comply with its decisions, according to two different procedures:

- Imposing any of the penalties stated in the Law, in case of violating legal provisions, competition rules or the transparency and equal opportunity principles.
- Imposing sanctions in cases of violation of its provisions or prejudice to any of the generation plants or tampering them and these sanctions ranged from fines to aggravated imprisonment in accordance with the gravity of the acts.

Several other tools are available to EgyptERA to ensure compliance with regulatory framework, as for instance market monitoring, publication of performance benchmarking, warnings, legal action.

7.6.6 Transparency and Accountability

EgyptERA is responsible for disseminating information, reports and recommendations to help actors of the electricity sector and customers to know and understand their rights and duties as



well as to explain the nature of EgyptERA's role in the electricity sector in a fully transparent way. Information about EgyptERA is available on its website and includes information on its internal organization, missions, duties and reports. The regulator uses different communication tools, such as website, newsletters, annual report, awareness flyers, publications and press releases, social media and smart services programs such as mobile applications and text messages.

Even though the Law 87/2015 does not provide for compulsory consultation process, EgyptERA in practice uses various tools to consult stakeholders, such as public hearings (organised by the licence department only), written consultations, workshops, meetings with service providers, electricity stakeholders and consumer associations. Within the framework of the above Twinning Project, a Public Hearing and Public Consultation Procedures manual was developed, adopted by the Board of Directors and is already in force.

Also, in order to communicate appropriately on the fulfilment of its duties and results of its actions, EgyptERA publishes on its website its Annual Report, as well as detailed information on the new regulations and rules drafted by the Regulator. Prior to its publication, the Annual Report is approved by the Board of Directors of EgyptERA.

In addition, EgyptERA implements a transparent auditing mechanism of its financial operations which is performed by an independent third party. As stipulated in the legislation, its financial accounts are submitted to the Accountability State Authority (ASA) for auditing purposes, while the implementation of its budget is submitted to the Court of Auditors for transparency purposes and certification. The results of the auditing of its financial statements by ASA are published on EgyptERA's website, together with its Annual Report. The decisions of EgyptERA are reasoned, with the view to allow for judicial review, which includes the ability for third parties to appeal against those decisions. Such decisions are also published on the EgyptERA's website.

In addition, there is not an established procedure for the regular, formal or informal, reporting of EgyptERA to the Parliament. The Chairman of the Board of Directors (i.e., the Minister of Electricity and Renewable Resources) reports yearly to the Energy Committee in the Parliament about several issues including EgyptERA's annual plan of work and budget. EgyptERA's Executive Chairman reports to the Court of Auditors.

7.7 CRE (France)

7.7.1 Legal status

The French Regulator, the Commission de Régulation de l' Energie (CRE), is an independent administrative authority created by law in 2000. CRE regulates the French electricity and gas networks and the French electricity and gas markets and issues binding decisions

7.7.2 Independence

a) Political & Legal Independence

CRE is distinct and functionally independent from any other public or private entity. It is autonomous from direct instructions by the government and any other public or private entities. Article L. 133-6 of the "code de l'énergie" (Energy Code), as modified by Law 55 of 20 January 2017, clearly specifies that "officers of the Commission shall exercise their functions impartially without receiving instructions from the Government or any institution, person, undertaking or organization".

⁶ Article L. 131-1 and s. of the French energy code



CRE's decisions and functions are carried out by the Board of the Commission (College). The College comprises five Members and the President. The Members of the College and the President are selected following an open call for candidates. Selection is done based on the selection criteria as outlined above. Candidates are heard in the Parliament.

- The President is appointed by a decree of the President of the Republic.
- One Member is appointed by the President of the National Assembly, on the basis of his/hers legal, economic and technical qualifications in the field of personal data protection;
- A second Member is appointed by the President of the Senate, on the basis of his/hers legal, economic and technical qualifications in the field of local public energy services;
- A third Member is appointed by decree, on the basis of his/hers legal, economic and technical qualifications in the fields of energy consumer protection and energy poverty;
- A fourth Member is also appointed by decree, on the basis of his/hers legal, economic and technical qualifications in the fields of energy demand management and renewable energies;
- Finally, the fifth Member, again appointed by decree, is selected upon the proposal of the Minister responsible for overseas territories, on the basis of his/hers knowledge and experience of non-interconnected areas.

The composition of the College respects parity between women and men. College Members and the President are appointed for six years. Their mandate is non-renewable. Members and staff of the Commission are bound by professional secrecy for the acts and information which they may have become aware of in the course of their functions. Failure to respect professional secrecy, as established by a court decision, entails their automatic termination of duties within the Commission.

The obligation for professional secrecy naturally does not hinder CRE in communicating with the Competition Authority, Financial Markets Authority, the Agency for the Cooperation of Energy Regulators (ACER), or with an authority of another EU Member State exercising powers similar to those of CRE.

The functions of the President and other College Members are incompatible with any municipal, regional or European elective office and with the direct or indirect holding of interests in an energy company. In accordance to the terms and conditions laid down by a decree of the Conseil d'Etat, the College, with the exception of its President, is renewed by half every three years.

Board Members can only be dismissed in the cases provided for in Article L. 132-5 of the Energy Code, namely in the case of non-compliance with the incompatibility rules outlined above, a serious breach of trust or impediment. Incompatibility rules notably prohibit Board Members to hold any elective mandate and to hold any direct or indirect interest in a company in the regulated sector. Until now there has never been a removal from CRE's College.

To further safeguard CRE's independence and autonomy, the President and the other College Members are prohibited to take a job or an interest in a company in the energy sector until the expiry of a period of three years following the end of their mandate (cooling-off period). In case of violation of these rules, a criminal sanction of 3 years imprisonment and a €200.000 fine (the amount of which may be increased) may be pronounced.

An internal regulation safeguarding independence also applies to staff Members. Cooling period restrictions may also apply to the members of staff. The applicability (and duration) of the cooling period is defined on a case by case basis. Decisions take into account the position of the employee CRE (e.g. access to sensitive data) as well as the duties and tasks related to his/hers new position. Cases are referred to the National Deontology Commission.



The Table below summarizes the formal obligations of CRE vis-à-vis the Government and the Parliament.

Table 4: CRE Formal Obligations for Approval

Obligations	Government	Parliament
Annual Activities Report	Х	Х

b) Financial Independence

CRE is funded through the national budget. The process related to the drafting and approval of CRE's budget is specified by law. A draft budget is prepared by CRE and presented to the Ministry for Economic Affairs. The budget is approved by the Parliament based on a proposal of the Ministry for Economic Affairs. No other governmental body is involved with respect to the manner in which the Authority's resources are used.

For the first time since 2009, CRE's budget has increased to face its enlarged missions and tasks. Annual audits of the budget (Ex post control of financial management) are conducted by the French Court of auditors.

c) Functional Independence

The decisions of CRE can be appealed in front of the Administrative Court, Tribunals, Paris Court of Appeal and even State Council, depending on the situation. Pending the outcome of the procedure, the appealed decision remains in effect.

7.7.3 Competences

a) Information Access

CRE has full access to financial and technical information from sector participants. Article 134-18 of the French Energy Code explicitly specifies that in order to carry out the tasks entrusted to the Authority, CRE collects all the necessary information from (a) the Ministers responsible for the economy, the environment and energy, (b) the transmission and distribution operators of electricity and gas and the operators of liquefied natural gas facilities, (c) end-user suppliers benefiting from regulated access (d) nuclear plants (e), operators of transport networks and of geological storage of carbon dioxide and other undertakings involved in the electricity or natural gas market. The law further specifies that CRE may also hear any person considered likely to contribute to the collection of necessary information.

Information is collected at the expense of the information providers and to extent related to the size of the undertaking concerned. CRE has an IT system that allows regular data monitoring from energy sector participants.

b) Security & Quality Of Supply

The Authority analyses the consistency between network development plans and the TYNDP and approves the plans submitted by the electricity and gas system operators. As part of a multi-annual programming of electricity production, if the projected production capacities are shown not to meet forecasted demand, the Minister for Energy may initiate a tendering process. CRE is responsible for the implementation of such a tendering process.

In this context, CRE ensures the preparation of the scope statement, the tally of the offers and issues an opinion on the candidates, among which the Minister designates the candidate(s) to keep (Article L 311-10 of the Code of energy). CRE does not participate in short term measures to cover peak demand and address shortfalls of one or more suppliers. The regulator is the fully competent Authority regarding the quality and level of maintenance of the networks as well as quality of supply.

c) Market Opening And Market Monitoring

The French electricity and gas markets have been fully open since 2007. Since 2006, CRE has



been assigned with the competence of monitoring the wholesale electricity and natural gas markets, in particular ensuring that the offers made by market players are consistent with their economic and technical constraints. The aim is to ensure that prices are consistent with the physical and economic fundamentals which determine supply and demand. CRE's task of monitoring wholesale markets is also part of the framework set by the Regulation on Energy Market Integrity and Transparency (REMIT) which prohibits market abuses in wholesale electricity and gas markets.

CRE's Committee for Settling Disputes and Sanctions CoRDiS has the power to sanction breaches and violations of this regulation. As part of its overall market monitoring activity, CRE produces an annual report on the functioning of wholesale markets. This annual report is being published since 2007. The report analyses the activities in the gas and electricity wholesale markets and reports on inquiries, audits and one-off analyses performed each year. With respect to matters relating to competition, CRE cooperates with the financial authority, the competition and anti/trust authority and other regulatory authorities regarding cross-border issues.

d) Tariff Setting

CRE sets the methodology and levels of transmission and distribution tariffs. It also sets the methodology for the provision of balancing and ancillary services, approves the conditions for access to cross border infrastructures and is involved in setting connection fees. The Authority has the power to require transmission and distribution system operators to modify terms and conditions, tariffs, rules, mechanisms and methodologies so as to ensure they are cost reflective and applied in a non-discriminatory manner. Performance-based components can be included in the tariff methodology.

Pursuant to article L337-4 of the Code of Energy, CRE issues a recommendation on selling regulated tariffs for electricity.

CRE issues an opinion for fixing the purchase conditions of produced energy from small facilities, recovery of household waste or using renewable energy (obligation given to EDF and non-nationalized distributors to purchase energy produced by these producers) (article L 314-4 of the Code of energy).

CRE also proposes to the Minister of Energy the conditions for the sale of a portion of the incumbent's nuclear energy (ARENH) to other suppliers in order to ease the entry of new actors on the wholesale and retail markets. This nuclear energy on sale may be acquired by suppliers servicing end-users consumers on the continental mainland or network operators for their losses (Articles L 314-1 to L 314-13 of the Code of energy).

CRE issues an opinion on the overall maximum volume of nuclear power that can be sold, depending in particular on the development of competition in the electricity generation markets and the supply to consumers. This maximum overall volume, that is strictly proportionate to the objectives, cannot exceed 100 terawatt hours per year. CRE also sets the volume of nuclear electricity sold to each supplier sub-annually (Article L 336-3 of the Code of energy).

Further, CRE issues an opinion on the regulated sale tariffs of natural gas for the Ministers of Energy and the Economy (Article L 445-2 of the Code of energy).

e) Licensing

There is no licensing in France.

f) Dispute Settlement

The Standing Committee for disputes and sanctions CoRDiS was created by law in 2006 but its activities were previously managed by CRE's College. The committee executes CRE competencies with regards to sanctions and settles disputes related to the access and use of public electricity grids and natural gas networks.

The Committee is composed of two government counsellors, appointed by the Deputy



Chairman of the State Council ("Conseil d'Etat", the highest administrative court in France), and two counsellors from the Cour de cassation. The Committee Chairman is appointed by a decree. The members of CoRDiS are appointed for a six-year non-renewable term. They cannot be dismissed except under rules equivalent to those for members of the Board (except for serious misconduct).

Pursuant to Article L. 134-19 of the French Energy Code, the CoRDiS can be seized in case of a dispute between: (i) operators and electricity or gas transmission or distribution network users; (ii) operators and natural gas storage facility or LNG facility users; (iii) operators and carbon dioxide transmission and geological storage facility users. CRE does not have the power to act as an arbitration authority in for any interested party but only for conflicts between entities listed above. CoRDiS is competent on disputes dealing with access and use of networks, transmission systems and facilities.

g) Unbundling

CRE has an active role related to unbundling. The Authority establishes guidelines on how separate accounts should be drawn and guidelines for compliance review and for reporting obligations regarding the unbundling process. The Authority has the power to mandate changes in accounting practices where it determines that the sector participants are not sufficiently unbundled. It also has a mandate to establish rules regarding the allocation of costs resulting from the unbundling process. Under the Third European Energy Package, CRE has also been entrusted with the certification of electricity and gas transmission system operators.

To further ensure the independence of network operators, CRE:

- Issues beforehand a reasoned opinion for the revocation of a person who provides overall direction to an electricity or gas transmission or distribution system operator (Articles L 111-30 and L 111-66 of the Code of energy).
- Publishes an annual report on the compliance of transmission and distribution system operators with their codes of conduct (Article L 134 -15 Code of energy).
- Issues decisions specifying the conditions for carrying out the missions entrusted to transmission and distribution system operators (Article L 321-2 of the Code of energy).
- Approves, after consultation with the Competition Authority, the accounting rules for the separation of activities between production, transmission and distribution of electricity, and other activities of operators involved with electricity, and between transport, distribution, and storage of natural gas and installation operators of liquefied natural gas and other activities of operators involved with natural gas (Article L 111-86 of the Code of energy and Article L 111-89 of the Code of energy).
- Serves a monitoring and surveillance role embodied by the possible exercise of its powers to investigative and sanction (to verify the correct application of principles of separation, so as to prevent cross-subsidization, discrimination or restriction of competition) (article L 134-18 and L 134-25 to articles L 134-34 of the Code of energy).
- Identifies and acts to limit abuse of positions and practices impeding the free exercise of competition. The Competition Authority shall notify CRE of any referral within the scope of its competency, and it may refer to CRE for its opinion on any matter relating to the electricity or natural gas sectors (Article L 134-16 of the Code of energy).
- Approves, prior to their implementation in the electricity sector, the rules for submission
 of adjustment proposals and programs, as well as the criteria for choosing between the
 proposals submitted to the public transmission system operator (Article L 321 14 of the
 Code of energy).
 - h) Technical Competences

CRE has the power to



- set or approve rules regarding the management and allocation of interconnection capacity;
- issue secondary legislation, including market rules, grid codes and other such technical rules;
- define metering rules and charges;
- approve operational and planning standards including schemes for the calculation of total transfer capacity;
- require that transmission and distribution operators correct any congestion difficulties;
- grant exemption(s) for third party access for new investment.

CRE also has the power to set/approve/provide an opinion on quality of service standards and congestion management rules and standards. The Authority maintains an audited account of any revenues collected pursuant to congestion management mechanisms. The Authority has the power to sanction or intervene in cases of violations of such service standards.

i) Consumer Protection

CRE has the obligation to inform all consumers about their rights regarding access to infrastructure and energy markets and to ensure that all customers have access to their energy consumption data. CRE has created and participates, in conjunction with the Médiateur National de l' Energie (national energy ombudsman) and the Directorate of the Ministry in charge of consumer issues in the website www.energie-info.fr. This one-stop service aims at informing consumers about their rights and the steps they can take concerning energy.

CRE does not have direct powers to address the needs of vulnerable consumers. Such issues remain primarily within the scope of the parliament and the government. However, CRE issues opinions concerning the rate mechanism for social purposes designed to guarantee the right for people in situations of precariousness to have electricity, according to Articles L. 121-5 and L. 337-2 of the Energy Code. The Authority also issues opinions on the special solidarity rate for the supply of natural gas, and services related to it, applicable to residential customers who qualify for special "staple product" pricing referred to in Article 4 of Law n° 2000-108 of 10 February 2000 (Article L. 445-5 of the Energy Code).

Further, CRE estimates the amount of expenses attributable to public service tasks, which are subject to full compensation in accordance with Article L 121-10 of the Code of energy and proposes to the Minister of Energy the amount of public service charges and the amount of the contribution applicable to each kilowatt-hour. It also proposes to the Ministers of Energy and the Economy the amount of repayments made to the operators supporting public service charges (Article L 121-13 of the Code of energy).

7.7.4 Internal organization

CRE decides on its internal organization and its human resource policy (hiring and firing staff, deciding on staff allocation/ staff composition). There are specific criteria related to each open position. Candidates are selected following a public call for tenders and undergo an interview with the Authority. No written entry exams are required. The final decision for the selection and appointment of staff members lies with the President. CRE is fairly free with its staffing policy and the status of its employees. Some are civil servants but the vast majority of CRE's employees is not.

The salaries for Board members are established by a number of regulatory texts published in the Journal official. In more detail, the salaries of the Board members correspond to the remuneration of a director in a central administrative body, but they are slightly lower than salaries of members of the government, and lower than the top management in the energy industry.



The salaries of the staff members are set according to the professional experience/background of each member. In general, the levels of salaries of CRE staff are higher than those of civil servants and government officials but lower than those in the industry. CRE employed 149 members of staff in 2017 (excluding Board Members).

CRE's staff is bounded by a Code of Ethics.

7.7.5 Enforcement

CRE, has the power to sanction sector participants and may publish comparative reports demonstrating insufficient performance by the network operators. The Authority has the power to require TSOs and DSOs, if necessary, to modify the terms and conditions, including tariffs or methodologies. CoRDiS enforcement mechanisms may include temporary prohibition of network access, temporary prohibition of professional activities of the imposition of penalties. A procedure to avoid deadlock in regulatory board decisions (e.g., does one board member have a deciding vote, etc.) is in place.

As regards investigatory and sanctioning powers, investigations are conducted by members of CRE's staff who are appointed by the President of CRE. At the end of the investigation and if the investigator believes a breach has been committed, he/she drafts a report which is sent to the person being investigated and to the President of CRE. The President of CRE can decide to close the case or to bring it to a separate body within CRE called the CoRDiS (CoRDiS members are independent judges from the highest civil and administrative courts in France). CoRDiS can also deal with cases of its own initiative. If the case is brought before the CoRDiS, its President appoints one of its members who acts as a prosecutor. Where appropriate, this member can issue a formal notice to comply and/or a notice of prosecution. At last, CoRDiS judges deliberate to make a decision (the investigator and the member in charge of prosecution abstain from taking part in the deliberations).

7.7.6 Transparency and Accountability

Information on the regulatory authority (its missions, duties, organization chart, reports) is published/ through the Regulator's website. All decisions are made public and several are also translated into English.

Information on all sorts of regulatory issues and practices such as tariffs, market monitoring data (except confidential data) can be found on the regulator's website however not all information is available in English. For certain decisions (i.e. tariff setting) there is a clear obligation (i.e. written in law) to organize a public consultation. For other tasks and even if it's not a binding procedure CRE may organize a consultation. There are several consultation tools employed. These include public hearings, written consultation, workshop, discussions and debates in purposely formed focus groups/stakeholder groups.

CRE issues an annual report and has reporting obligations towards the Government and Parliament. The Authority has a well-defined communication.

7.8 RAE (Greece)

7.8.1 Legal Status

The Regulatory Authority for Energy (RAE) is an independent administrative body, currently responsible for regulating, monitoring and supervising the Greek energy market, on the fields of electricity, gas, renewable energy sources and oil. It was established on the basis of the provisions of L. 2773/1999, 'On the Liberalization of the Electricity Market' (Government Gazette A' 286/22.12.1999), as amended applies, with a view to harmonizing the Greek legislative and regulatory frameworks with the provisions of Directives 96/92/EC and 98/30/EC concerning common rules for the internal market in electricity and natural gas respectively (later repealed



and replaced by Directives 2003/54/EC and 2003/55/EC).

The L. 4001/2011 'On the Operation of the Electricity and Natural Gas Energy Markets and on the Exploration, Production and Transmission of Hydrocarbons' (Government Gazette A' 179/22.8.2011), as amended applies, which incorporated the European Directives 2009/72/EC and 2009/73/EC for the liberalization of the electricity market, further enhanced RAEs competencies and modified provisions mainly regarding administrative and financial independence, composition of the Board of Directors, legal status of the members of the Board of Directors and operational procedures.

7.8.2 Independence

a) Political and legal independence

The members of the Board of Directors of RAE are senior officers of State who enjoy full personal and operational independence in the exercise of their duties and are not subject to scrutiny or supervision by the government or other administrative bodies. RAE Board comprises of seven (7) members, including the Chairman and two (2) vice Chairmen who are distinguished for their scientific training and professional aptitude, have specialist experience in matters for which RAE is competent and can provide guarantees of independence and impartiality, selected through an open procedure provided by law for a five-year term of office, while they may not serve more than two (2) terms of office. Members of the RAE cannot be recalled during their term of office.

The President and the two vice Chairmen are, thereby, appointed by virtue of a Decision of the Council of Ministers and the other Members of the Board of Directors of RAE by a decision of the Minister for Energy and Environment, following a positive opinion of the Committee on Institutions and Transparency of the Hellenic Parliament. All members of RAE are bound, in the exercise of their duties, by the provisions of the current legislation and are obliged to comply with the principles of independence and impartiality and act independently of any economic interest. Specific provisions of L. 4001/2011 clearly foresee that members of the RAE shall neither seek nor accept direct instructions from the government or administrative bodies or from any other person or agency, for the exercise of their duties and competencies.

Such independence is safeguarded by the following provisions:

The members of the Board of Directors work for RAE on a full-time basis, with the exception of part-time teaching positions in higher education establishments, technical colleges, nonprofit research agencies, other regulatory authorities/ agencies or establishments and officers of regulatory authorities.

During their period of service, it is prohibited for Members of the Board of Directors to be partners, shareholders, board members, managers, employees, technical or consultants to an undertaking subject to direct or indirect control and supervision by RAE during their term of office. It is also prohibited for the members of Board of Directors of RAE to hold stocks or shares in undertakings subject to direct or indirect supervision by the RAE, with the exception of indirect holdings through mutual funds or pension schemes which invest in equities. For the above purposes, the members of the Board of Directors of RAE are obliged to file a statement of property interests in accordance with the provisions of Article 1 of Law 3213/2003 (Government Gazette 309A).

Moreover, for a period of two (2) years after expiry of their term of office, all Members of the Board of Directors of RAE may not be partners, shareholders, board members, technical or other consultants or employees (with or without pay, on a retainer or with any form of contractual/legal relationship) of a company or undertaking whose activities were subject to direct or indirect control and supervision of RAE during their term of office. Members of RAE shall bear disciplinary liability for every breach of their obligations pursuant to the current legislation.



b) Financial Independence

The financial independence of RAE, which is an essential condition for the preservation of the Authority's independence, was effectively ensured by the provisions of the relevant legislation, through which it is anticipated that the Authority possesses its own resources. These resources are managed in accordance with the Presidential Decree 139/2001 "Regulation for the Internal Operation and Administration of RAE", while financial management is subject to ex-post auditing by Independent Auditors and the Court of Auditors. RAE budget is attached to the budget of the Ministry of Energy and Environment and its implementation is monitored by the State Annual Accounts and State Budget Monitoring Committee, as stipulated in Parliament's Rules of Procedure.

RAE is obliged to draft an Annual Report, on its activities and the performance of its duties, listing the measures taken and the results achieved for each of its duties and responsibilities. This Report shall be submitted to the Hellenic Parliament, the Minister for Energy and Environment, the Agency for the Cooperation of Energy Regulators and the European Commission. It shall also be posted on RAE's official website. The Annual Report referred to above also contains a review of the implementation of its budget. RAE is the owner of the premises in Athens, where its seat and offices are located.

c) Functional Independence

RAE Decisions on individual executive acts of RAE ("atomikes dioikitikes praxeis"), may be challenged before RAE, by virtue of an Application for Review, which is an administrative appeal, within a certain deadline. The decision of RAE on the Application for Review, may further be challenged before the Athens Administrative Court of Appeal. Appeals against judgments of the Athens Administrative Court of Appeal may be challenged before the Council of State. RAE Decisions of regulatory nature ("kanonistikes praxeis"), may be challenged before the Council of State at first and last instance.

7.8.3 Competences

a) Monitoring and supervision of the Greek Energy market

RAE monitors the operation of all sectors of the energy market (Electricity, Natural Gas, Oil Products, Renewable Energy Sources, Cogeneration of Electricity and Heat etc.). For this purpose, RAE is competent for collection and processing of information from companies in the energy sector, while respecting the principles of confidentiality.

b) Primary and secondary legislation

RAE is competent to submit opinions on presidential decrees to be issued, as well as to propose legislative regulation to advance and resolve issues in connection with the performance of its mission to the Hellenic Parliament and the minister with material jurisdiction, further to the specific authorization granted by the relevant legislation. The Regulator is also competent to issue the Market Codes and Regulations provided by the current legislation and may issue announcements, published on its official website, on the interpretation and application of the current legislative and regulatory framework, within the scope of its competencies.

c) Security of Supply

RAE monitors the security of energy supply, especially with regard to the balance between supply and demand on the Greek energy market, anticipated future demand, anticipated additional electricity and natural gas production, transmission and distribution potential already programmed or under construction, the standard and level of maintenance and reliability of transmission systems and distribution systems and the application of measures to cover peak demand and conditions on the energy market in terms of the facility to develop new production potential. For these purposes, RAE prepares and publishes a relevant Report, taking into account the regular forecasts made by Transmission and Distribution System Operators.



RAE also monitors the implementation of security measures taken in the event of a crisis on the energy market or where the physical integrity or safety of persons, machinery or plant or the integrity of energy systems are at risk. RAE is appointed as the competent authority for the application of the measures required under Regulation (EU) No 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard security of gas supply (OJ L 295). In addition, RAE is responsible for the requirements of Articles 6 and 7 of Regulation (EU) No 994/2010 in its capacity as competent authority.

d) Licensing

RAE is competent (by virtue of current legislation) for the granting, amendment or revoke of licenses for energy-related activities, pursuant to the principles of transparency and equal treatment and taking account of the specific attributes of applicants, consumer protection, environmental protection and the need to safeguard healthy competition. RAE also monitors and controls the manner in which rights granted under such licenses are exercised and compliance with their obligations by license holders.

e) Development of infrastructures and monitoring of development plan

RAE is competent to consider and decide on amendments to the development plans prepared by the competent Transmission System Operators, as well as to evaluate the application of development programs. RAE also monitors the time needed for the Transmission System and Distribution System Operators to connect users, effect repairs and provide services to system users. RAE may set deadlines for the above and penalty clauses for the benefit of users if deadlines are missed.

f) Prices of non-competitive activities.

RAE decides on the methodology used to calculate the prices of non-competitive activities, based on transparent criteria, as provided by law. The methodologies used and the prices of non-competitive activities are published on the websites of RAE and the competent Operators.

g) Unbundling of TSOs/ DSOs. Certification of transmission system operators/ Compliance Officer.

RAE decides on certification of Transmission System Operators in accordance with the criteria and procedure set out by current legislation, monitors the implementation of the unbundling regulation, as well the respective compliance of the Transmission and Distribution System Operators.

h) Consumer protection

RAE supervises the application of consumer protection measures, in accordance with current legislation. RAE also examines customer complaints which derive from or relate to matters of regulatory supervision provided for under current energy legislation and not relating to disputes of a civil or commercial nature.

i) Regional cooperation/Agency for the Cooperation of Energy Regulators

RAE cooperates with the Hellenic Competition Authority Regulatory on cases of market dominance, predatory and anticompetitive behavior. Legislation also stipulates cooperation with Authorities of other countries, ACER, international organizations and the European Commission.

i) Access to interconnections

RAE adopts, monitors and supervises the application of interconnection access rules, including related prices and the methodology used to calculate them and capacity allocation and release and congestion management mechanisms, the provision of balancing services and the procedure for the amicable resolution of disputes, which arise during the application of the above and any other relevant issues, in cooperation with the competent transmission system operators and the regulatory authorities in other interconnected states.



k) Consultation

RAE conducts public consultation where expressly provided under the relevant legislation, especially prior to adopting decisions or regulatory measures that might have important repercussions on the relevant energy market, thereby giving interested parties the opportunity to formulate an opinion and submit their comments on the proposed measures. Public consultation is conducted over a reasonable period of time and the results of it and RAE's conclusions are posted on its official website.

I) Arbitration

By virtue of the L. 4001/2011, a permanent arbitration tribunal is established at RAE, to which the following shall be referred for an award:

- (a) disputes between persons engaged in any manner of activity in the energy sector;
- (b) disputes between eligible customers, as defined herein, and undertakings engaged in energy-related activities;
- (c) any dispute that arises between the above persons from the application of the relevant national and EU legislation in force.

The above disputes may only be referred to arbitration if there is a written arbitration agreement between the parties.

7.8.4 Internal Organization

Administrative and technical support shall be provided to RAE by its Secretariat. RAE secretariat is divided into directorates in accordance with the specific provisions of RAE Rules of Procedure. Each directorate comprises of departments to which directorate staff is allocated in accordance with the specific provisions of the RAE Rules of Procedure. The heads of the directorates and departments and their deputies are selected from members of RAE secretariat who satisfy the criteria set out in the RAE Rules of Procedure and the current legislation.

The maximum amount of the staff of RAE, as well as certain categories of staff (i.e. lawyers) either on permanent or on temporary contracts, is provided by the respective legislation (founding law and other legislative provisions). Also, the filling of vacancies in RAE is also provided by specific legislation.

7.8.5 Enforcement

RAE is competent to conduct investigation in order to detect infringements of the regulatory framework and impose penalties in case of breach of respective obligations. Moreover RAE, acting ex officio or pursuant to a complaint, may issue a reasoned decision adopting appropriate interim measures, prior to its final decision, which are immediately enforceable and shall only be open to appeal before the Athens Administrative Court of Appeal in accordance with the provisions of L. 4001/2011. Appeals shall not prevent enforcement of decisions imposing interim measures.

RAE may also impose fines, according to the provisions of L. 4001/2011, in case of violation of the primary and secondary energy legislation. The method and individual criteria applicable to fines are provided to be specified by decision of RAE, to be published in the Government Gazette. The fines provided as above, shall be collected in accordance with the Public Revenue Collection Code for and on behalf of RAE and shall be remitted to it.

The fact that a fine has been imposed shall not prevent other administrative penalties from being imposed under other provisions, especially under Law 3959/2011, for the same infringement. RAE may withdraw the licenses provided by the energy legislation in the event of systematic and repeated infringement of the legislative framework and the terms on which they



were granted. Withdrawal may be ordered in parallel to a fine.

7.8.6 Transparency and Accountability

By virtue of its Annual Report, RAE presents to the Greek Parliament the performance of its competencies and duties, provided by the relevant legislation. RAE's website is currently updated with the existing energy legislation, RAE's internal organization, actions and activities on all supervised energy fields, as well as the relevant regulatory decisions.

Moreover, by virtue of the public consultations on several issues and proposed measures on the energy market, RAE is giving the opportunity to interested parties to formulate an opinion and submit their comments on the above measures, prior to RAE's decisions. RAE also communicates current developments of the energy sector through conferences, seminars, congresses, workshops, international exhibitions, actions which raise awareness on RAE's work and competencies in the energy sector.

7.9 PUA (Israel)

7.9.1 Legal status

The Israeli Electricity Market Regulatory Authority (PUA) was established by the so-called Electricity Market Law of 1996 law as a public body. In addition to PUA, other bodies have also been assigned with competences to make, amend or assist with regulatory decisions (licensing, tariffs) or are in some way involved in the regulatory decision-making process.

7.9.2 Independence

a) Political & Legal Independence

PUA has been established as an independent authority. It is separate from the Ministry of National Infrastructures in terms of budget and staff. The Authority is overall only partially independent. Although it is autonomous in the sense of not receiving direct instructions from government or other public or private entities when carrying out its regulatory tasks, it operates within the government and ministerial policy. With the exception of tariff setting, where the Authority is completely autonomous, the Ministry may interfere, to a certain extent, in actions and decisions of PUA.

The composition of the Authority is also determined by the 1996 Electricity Sector Law. The Authority comprises:

- The Chairman;
- Two representatives of the Government: a representative of the Minister of Natural Resources and a representative of the Minister of Finance. Both are chosen from within the staff of the respective Ministries. Positions are often assumed by the General Manager of the Ministry of Natural Resources and the Head of the Budget Department in the Ministry of Finance. The selection of the two representatives is made without a public call.
- Two representatives of the public. These need to have a degree in one of the following subjects: economics, accountancy, business management, engineering, or another subject related to the electricity sector, as well as a cumulative experience of at least five years in the aforesaid fields.

The Chairman of PUA is subject to a public call with the following criteria as specified by the Electricity Law: "The Chairman of the Authority shall be an Israeli citizen and resident who meets two of the following conditions: (1) He has a degree in one of the following subjects: economics, business management, accountancy, engineering or other subject related to the



area of the Authority's function under this Law; (2) He has a cumulative experience of at least five years in a senior position in the management of a corporation with a significant volume of business, or in a senior position in the public service dealing with economic or engineering matters". The process is handled by a selection committee.

The Chairman's term in office is fixed to 5 years. For Board Members, the respective time is 3 years. Mandates are renewable once. The law provides that a Member of the Board or the Chairman shall cease to serve in one of the following cases: (1) on the occasion that he/she resigns out of own initiative by submitting a letter of resignation to the Government; (2) he/she is permanently unable to perform his/hers duties, and the Government, at the suggestion of the Ministers, dismisses him/her from position by written notice; (3) he/she is convicted of a crime that in the opinion of the Government's legal adviser is one of moral turpitude; (4) he/she was appointed from among the general public and subsequently became a civil servant, or was appointed as a Ministry representative and subsequently ceased to be a civil servant; (5) the Government has determined, at the suggestion of the Ministers and on behalf of the Authority, that he/she is not performing his duties in a fit manner.

Further, if a member of the Authority is absent, without proper reason, from three consecutive meetings of the Board or in excess of five meetings in one year, the Government may, at the suggestion of the Ministers, cancel his/hers appointment. Until now, there has never been an occasion where the Chairman or a Board Member was removed from office.

Formal rules that prohibit Board Members and staff to have interests (e.g. shareholding) in regulated utilities or to execute leading political functions are in place. The law also provides for a cooling off period. Board Members, and staff members cannot be engaged with a regulated entity after their service at the Regulator.

The Table below summarizes the formal obligations of PUA vis-à-vis the government.

Obligations	Government	Parliament
Tariff Methodology		
Opinions on Security of supply issues		
National Development Plans	X	
Draft Budget	X	
Annual Work Plan	X	
Annual Activities Report	X	

Table 5:PUA Formal Obligations for Approval

b) Financial Independence

The budget of the Authority is part of the national budget and subject to approval by the government. The budget is subject to constraints arising from the national budget. In practice, the budget requested by the Authority has always been approved and provided. Annual audits are internal and subject to governmental control.

c) Functional Independence

Decisions of PUA may be appealed at the Supreme Court. Pending appeal, the decision does not always remain in effect.

7.9.3 Competences

a) Information Access

According to the legal framework, PUA has full access to financial and technical information from sector participants. However, it is acknowledged that often cooperation is challenging and the data requested are not provided. The Authority does not have a dedicated IT system for



regular monitoring of data provided by the energy sector.

b) Security & Quality Of Supply

PUA monitors the medium and long-term supply and demand balance in the national market, estimates future demand and required additional capacity. PUA reviews national development plans and provides an opinion to the government. Regarding the short term supply/demand balance, the Authority participates in the implementation of measures to cover peak demand and is entrusted to address any shortfalls from one or more suppliers.

The Authority has the power to organize, monitor and/or control tendering procedures for new infrastructures including power plants if required. PUA monitors the level of maintenance of the networks and quality of supply. PUA sets standards regarding the quality of service and has the powers to sanction the service provider for not meeting service quality standards.

c) Market Opening and Market Monitoring

The Israel Electric Corporation (IEC) is the sole integrated electric utility in the State of Israel and generates, transmits and distributes essentially all electricity to customers in the State of Israel, the Jerusalem District Electricity Co. Ltd (JDECO) and the Gaza Strip. The State of Israel owns approximately 99.85% of IEC. Currently there is no specific timetable, or roadmap for market opening.

PUA collects information on market dominance as well as on predatory and anti-competitive behavior. The Authority cooperates with the competition and antitrust authorities and has a role in prohibiting abusive practices affecting wholesale energy markets and in detecting and investigating market manipulation practices.

d) Tariff Setting

The tariff methodology for transmission and distribution networks is fixed by PUA. PUA also sets the respective tariffs. The Electricity Market Law specifies that the Authority shall determine tariffs based on the principle of cost, considering inter alia the type and standard of the services. The law aims to ensure the absence of cross-subsidies by specifically providing that "Every price shall reflect the cost of that service, with no reduction in one price at the expense of raising another price". Only on the occasion that the State budget foresees support for reducing the price of a certain service, it is possible to reduce a certain tariff. In such a case, the amount of the support is deduced from the cost of that service.

The law further specifies that before determining tariffs, the Authority shall review the costs borne by license holders providing "essential services7. PUA, when setting tariffs, may ignore some or all costs that in the Authority's opinion are not necessary for the essential service provider to comply with its obligations.

PUA has the power to include performance-based components in the tariff methodology (e.g. to apply incentive-based regulation) and can penalize the Israel Electric Corporation for non-performing according to certain standards by introducing a reduced rate of returns. They also set the methodology for the provision of balancing and ancillary services and for access to cross-border infrastructure. It is also involved in setting up connection fees.

PUA has the power to require transmission and distribution system operators to modify terms

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According to the Electricity Law, the holder of an essential service provider's license – (1) provides a service to the public in general without discrimination, according to the criteria determined by the Authority, reliably and efficiently; (2) purchases electricity from private electricity producers, and provides infrastructure and backup services; (3) provides backup services to the holder of a license to produce his own electricity, at his request; (4) acts to ensure the provision of all services throughout the term of his license, including provision of services under the development plan.



and conditions, tariffs, rules, mechanisms and methodologies to ensure they are cost reflective, and applied in a non-discriminatory manner. As there is no open market and only a sole supplier, tariffs for the supply of electricity to end consumers are also regulated and set by PUA.

Further, PUA sets the level of a so-called environmental tariff in the form of a premium for RES producers (feed-in tariffs) and also for plants firing oil-products that presumably have undergone some environmental revamping. It also imposes an environmental tax. RES licenses are granted according to a quota system. PUA sets the quota levels per technology and the rules for net-metering. The latter were firstly introduced in 2012. Until now PUA has not encountered any specific issues, or any type of intervention when setting tariffs.

e) Licensing

PUA has the power to grant licenses for power production and can modify terms and conditions of existing licenses. The Authority monitors the compliance of licensees with the license terms and conditions and reports/announces to the Ministry infractions for violations. PUA has no rights to impose fines.

f) Dispute Settlement

There is no dispute settlement body established within PUA. All affected parties may bring up to the Authority a complaint against a transmission or distribution system operator on issues related to grid access including third party access.

g) Unbundling

PUA has no direct role in unbundling. The Authority may establish guidelines on the unbundling of accounts and rules regarding the allocation of costs from the unbundling process. It also has the power to proceed with an assessment as to whether sector participants are sufficiently unbundled and can mandate changes in accounting practices. PUA has also the powers to draw up guidelines for compliance review and for reporting obligations regarding the unbundling process.

h) Technical Competences

According to the electricity law, PUA has been entrusted with the following functions:

- to set tariffs and the method for their update;
- to set criteria for the standards, nature and quality of the service provided by the holder of an essential service provider's license and to supervise the fulfillment of its duties;
- to grant licenses and supervise compliance with the terms stipulated in those licenses.

Within these main functions. the Authority has the power to:

- set or approve rules regarding the management and allocation of interconnection capacity;
- issue secondary legislation, including market rules, grid codes and other such technical rules;
- define metering rules and charges;
- approve operational and planning standards including schemes for the calculation of total transportation capacity;
- require that transmission and distribution operators address congestion;
- set quality of service standards;
- set congestion management rues/standards.
- i) Consumer Protection

PUA has some responsibilities over consumer protection including the power to address the



needs of vulnerable consumers and work towards the implementation of related government measures. The Ministry of Natural Resources and the Consumer Protection Agency are also involved in consumer protection.

The Authority has in place mechanisms to support customers including the provision of information on customer rights, complaint management. Further, the Authority has powers to monitor the time required for new connections and repairs and intervene where necessary. PUA has powers to sanction grid operators delaying connections and repairs.

7.9.4 Internal organization

PUA can decide on its internal organization (except for the organization of the Board). The Authority also decides on its human resource policy (hiring and firing staff, deciding on staff allocation/ staff composition). Specific selection criteria for hiring staff are in place. The final selection decision is made by the Chairman of PUA without the involvement of Board Members. Terms and conditions of PUA employees are those of civil servants. There is no legal restriction on the number of staff that can be employed within PUA. Currently (2017 data) there are 72 staff members. Salaries for Board Members and PUA staff are established according to the same pay-scales as for other public officials.

7.9.5 Enforcement

The Authority has some enforcing powers (for example the power to sanction participants for delays in connections and repairs). On the other hand, PUA has no powers to sanction license holders for breaching terms and conditions in their license.

The Authority assesses the performance of operators and has the powers to publish reports demonstrating insufficient performance and to revise tariffs or reduce rates of return. Other enforcement mechanisms that the Authority may employ include the temporary prohibition to network access and certain professional activities. Sanctioning powers and enforcement mechanisms have not been yet employed. As PUA's decision making body comprises 5 members (4 Board Members and the Chairman) there is no risk of a deadlock.

7.9.6 Transparency and Accountability

The decision-making process is well defined with specific voting procedures and rules. PUA publishes on-line its decisions and information related to licensing, tariffs and market monitoring data. Rules to protect confidential information are in place. Information however is not available in English. On line information regarding the Authority (mission, duties, powers, reports) is limited and again mostly in Hebrew. No information on the internal organization of the authority is available online.

The Authority consults on draft decisions with stakeholders. Consultation is carried out through public hearings, workshops, discussions within purpose made groups (focus groups/stakeholder groups) and in the form of written consultation. PUA is obliged to issue an annual report brought in front of the Parliament. The Authority has reporting obligations to the government. There are no other reporting obligations (in front of other public bodies or parliamentary committees). The Authority has a defined communications strategy.

7.10 AEEGSI (Italy)

7.10.1 Legal status

The Italian Regulatory Authority for Electricity and Gas (AEEGSI) is an independent body established under Law 481 of 14 November 1995 to regulate and control the electricity and gas sectors. An independent authority body is a public body which makes its own decisions under the terms of its founding law, procedures and regulations.



Following a referendum on the public management of water services held in June 2011, Law n. 214 (December 22nd, 2011) eliminates the National Agency for Regulation and Supervision on Water and transfers its functions and powers to AEEGSI; the general principles and objectives of electricity and gas markets regulation are going to be applied also to water infrastructures and water services.

The Legislative decree 4 July 2014, n. 102, implemented the European Directive 2012/27/UE on the promotion of energy efficiency in the Italian legislative framework and attributed to AEEGSI specific functions to regulate district heating and cooling.

AEEGSI functions with full autonomy and independence of judgment within the general policy guidelines laid down by the Government and Parliament and taking into due account the relevant European Union legislation. In its "Documento di Programmazione Economico-Finanziaria" (Three-year Economic and Financial Planning Document), the Government draws AEEGSI's attention to any developments concerning the public utilities that it would be in the country's general interest to promote. AEEGSI formulates observations and recommendations to the Government and Parliament and presents an annual report to Parliament and the Prime Minister on its activities and on the state of the regulated services.

7.10.2 Independence

a) Political & Legal Independence

AEEGSI has adopted a code of conduct for its members, management and staff members.

To safeguard AEEGSI's independence and autonomy, Board Members and Directors (only if responsible for regulatory decisions in the last two years) are expressly forbidden to have any direct or indirect professional relations with any company operating in the regulated sectors during their term in office.

All employees, including those on temporary contracts or seconded from other administrations, may not take on other jobs or positions or carry out other professional activity, even on an occasional basis. Violation of these non-compliances may cause forfeiture of the post held and, should the deed not constitute an offence, shall be punished by a fine.

Board members and Staff Members may not hold direct or indirect interests in companies in the regulated sectors. The Authority has adopted a code of conduct for its members, management and staff. Violation of these non-compliances may cause forfeiture of the post held and, should the deed not constitute an offence, shall be punished by a fine. AEEGSI's decisions are binding but subject to judicial review. Appeals against AEEGSI's decisions can be lodged with the "Tribunale Amministrativo Regionale (TAR)" (Regional Administrative Court) for the Lombardy Region. Appeals against the rulings of the TAR can be presented to the "Consiglio di Stato" (Council of State).

Obligations	Government	Parliament
Tariff Methodology		
Opinions on Security of supply issues	X	Х
National Development Plans	X	Х
Draft Budget		
Annual Work Plan		
Annual Activities Report	Х	Х

Table 6: AEEGSI Formal Obligations for Approval

Board Members are selected from highly qualified, experienced professionals in the sector. They are appointed by decree of the President of the Republic following nomination by the



Council of Ministers on the basis of a proposal by the Minister of Economic Development. Nominations are submitted to the competent Parliamentary Committees for scrutiny, and the appointment is based on a two-thirds majority vote. Regarding the term of office for Board Members, it is not renewable and fixed in seven years. Board members may not be removed and after the conclusion of their mandate a two years cooling —off period is scheduled. They may not be engaged within any regulated entity in the regulated sectors.

The recruitment process for hiring staff members is carried out with public and open applications, which includes predefined criteria and Selection committee. Final ranking and results are published on AEEGSI website.

b) Financial Independence

AEEGSI is funded through annual contributions paid by the service providers, which are established autonomously within the maximum percentage of 1/1000 of contributors' revenues for the previous financial year, as set by Law 481/95. (actual levy 0,028 % of revenues from electricity and gas sector and 0,025% from water service)

Unless its budget is not approved by any other entity, as a public body AEEGSI must respect the general accounting rules for the Italian public sector, also consider spending review process which has limited its expenses. A Board of Accounts (composed by external experts or administrative judges) verifies the administrative and accounting management of the Authority, controls at least once every three months, the activities related to financial and asset management as well as contracts, even on random basis, checks acts related to financial and assets management and periodically checks the cash values assigned to the cashier.

c) Functional Independence

The decision of AEEGSI can be appealed to the Judicial review of the Administrative Court (Consiglio di Stato) and, while appealing, the contested decision is suspended.

7.10.3 Competences

a) Information Access

AEEGSI has full access to financial and technical information from sectors participants and from utilities through extensive data flow that is mandatory requested to regulated bodies. The data are collected and securely stored in an in-house database.

b) Security & Quality Of Supply

AEEGSI is fully competent on quality and level of maintenance of the networks as well as quality of supply, where it defines indicators and standard and may impose fines and penalties. On the other side, it monitors medium and long-term supply/demand balance on the national market, expected future demand and envisaged additional capacity, even if the decisions are competences of the competent Minister. Moreover, it monitors new investments providing the necessary regulatory framework for tariff setting and capacity allocations.

c) Market Opening And Market Monitoring

Based on the EU Directives and their implementation in the Italian primary law, natural gas market was completely liberalized in 2002. The electricity sector was opened in 1999 when the former monopoly was split in separate companies dealing with generation, transmission, distribution, and selling activities. In 2007 all consumers are allowed to choose their supplier, even if SME and householders may remain until June 2019 under regulated tariffs.

AEEGSI monitors wholesale and retail markets and reports to the "Autorità garante della concorrenza e del mercato" (Italian Antitrust Authority) any suspected infringements of Law 287 of 10 October 1990 by companies operating in the electricity and gas sectors.

d) Tariff Setting



AEEGSI fixes transmission and distribution networks tariffs, provision of balancing and ancillary services, access to cross-border infrastructures and connection fees. General principles are to adopt cost reflective methodologies and to promote improvement in the quality of service to be delivered. On the other side AEEGSI may to penalize a non-performing service reducing rate of return over the tariffs

AEEGSI applies criteria of transparency when adopting general rules and decisions. The process involves full consultation with operators and the associations representing interested parties (consumer, environmental, trade union, and business associations) through the circulation of documents and the collection of written observations, discussed where appropriate during collective and individual hearings prior to the issuing of any provisions. These hearings are governed by specific regulations which include the possibility for the associations to bring specific and urgent questions to its attention and to propose that these be included in the agenda for discussion.

e) Licensing

AEEGSI may address observations and recommendations to the Government and Parliament with regard to licenses or authorizations, and to the Ministry of Economic Development with regard to licensing, convention and authorization schemes, and any changes to or renewal of the existing schemes.

f) Dispute Settlement

AEEGSI is in charge to settle dispute among consumers and regulated operators, also as derived by EU Directives. Main topics are grid access, third party access, cross-border disputes, unfair commercial conducts, errors in billing, undue disconnections and switching, etc.

g) Unbundling

Among its main powers, AEEGSI issues guidelines for the accounting and administrative unbundling of the various activities under which the electricity and gas sectors are organized.

Unbundling is carried out to achieve the objectives of transparency and standardization in the annual accounts of companies operating in the regulated sectors, of monitoring the costs of individual services, and of ensuring that electricity and gas costs can be properly disaggregated and broken down by function to enable the effective promotion of competition and efficiency

h) Technical Competences

AEEGSI has full capacity to set or approve rules regarding the management and allocation of interconnection capacity (generally shared within the EU regulatory framework), issue secondary legislation, including market rules, grid codes and other such technical rules (Grid codes and systems operations rules are elaborated by TSO\DSO and submitted to AEEGSI or approval), define metering rules and charges, approve operational and planning standards including schemes for the calculation of total transfer capacity, require that transmission and distribution operators correct any congestion difficulties, grant exemption/s for third party access for new investment.

AEEGSI establishes guidelines for the production and distribution of services and their standards. Quality standards may refer to both the terms and conditions of contracts (such as response time to calls or complaints) and technical aspects of the service (such as service continuity and safety). The regulator sets automatic refund mechanisms for users and consumers in cases where standards are not met.

AEEGSI monitors the conditions under which the services are provided, with powers to demand documentation and data, carry out inspections, obtain access to plants and apply sanctions, and to determine those cases in which operators should be required to provide refunds to users and consumers.

Regarding AEEGSI role in infrastructure development, it reviews and approves national development plans, and provides opinion to government on development plans. Set tariffs for



the use of infrastructures, including maximum prices net of tax, and tariff adjustments based on a price-cap mechanism (defined as a "ceiling on price variations on a multi-annual basis"). The price-cap mechanism sets a limit on annual tariff increases corresponding to the difference between the target inflation rate and the increased productivity attainable by the service provider, along with any other factors allowed for in the tariff, such as quality improvements. The tariff system is required "to reconcile the economic and financial goals of electricity and gas operators with general social goals, and with environmental protection and the efficient use of resources".

i) Consumer Protection

According to the funding law n. 481/95, AEEGSI:

- issues directives concerning the production and delivery of the services by the parties
 operating the said services, in particular establish the overall standards for the entire
 complex of services, and the specific standards guaranteed to the consumer, having
 heard the parties supplying the service and the representatives of users and consumers;
- publicizes the conditions under which the services are provided in order to ensure maximum transparency, the competitiveness of the supply and the opportunity for consumers to make better choices;
- assesses complaints, appeals and reports from consumers, individuals or associations, to respect standards of quality and tariffs by the service providers, with whom it shall intervene and where necessary, oblige them to change their mode of operation, or revise the service regulations;
- verifies that the measures adopted by the parties operating the service are adequate to ensure equality of treatment for all consumers;
- guarantees an uninterrupted energy supply, periodically checking quality and efficiency
 of the services, even surveying the opinions of the users
- quarantees all information about how services are delivered and relative quality levels
- ensures a prompt response to complaints, claims and reports concerning the quality and tariff standards.

With particular regard to vulnerable consumers, AEEGSI implements government measure in the energy sectors, and jointly act with Antitrust Authority. Its main activities are relevant to Complaint management, adopting also Alternative Dispute Resolution Mechanism), monitor energy prices and communication to improve consumers awareness.

7.10.4 Internal organization

AEEGSI formulates its own procedures for the adoption of provisions and enjoys organizational autonomy to lay down the rules governing its internal organization, functioning and accounting procedures, even if the maximum number of staff members is fixed by law.

The recruitment of professional and management staff follows the evaluation and assessment of candidates by an independent selection panel and as result of an open competition.

The Board adopts a final decision approving the procedures carried out by the selection panel and the recruitment is ultimately carried out by the Head of the human resources

Salaries are defined by law for Board Members, at similar level than government officials but lower than Industry officers.

Terms and conditions of employees are specific for independent regulators, and their salaries are set According to set pay scale for independent regulators. Similar levels to industry personnel but Higher levels than civil servants. Under the terms of its founding law, AEEGSI has ay employ a maximum of 210 staff on permanent or temporary contracts (120 and 90 units



respectively). In 2016, the staff consisted of 189 staff members on permanent and temporary contracts, plus 13 secondments:

- 81 Regulatory affairs Dept.
- 14 consumers Affairs Dept.
- 25 Enforcements Dept.
- 10 IT Dept.
- 59 Staff (legal, Institutional Affairs, HR, etc..)

AEEGSI collects almost 100 data bases for different aspects for its regulated sectors, which contents are provided on periodical basis by regulated entities. The regulator budget is around 100 million euro/year. Considering the number of electricity and gas consumers and without taking into account water and heating services, it costs yearly 1,8 euro/consumer.

7.10.5 Enforcement

In case of a noncompliance to regulation, AEEGSI may sanction operators with fines and penalties. In 2015 AEEGSI has gathered more than 5 million euro coming from fines. A name-and-shame policy allows publishing comparative table of operator's performances, for instance the results of a survey for the call center of market operators. According a new procedure, operators may submit commitments for Future Compliance in order to voluntarily recover the performance or behavior.

7.10.6 Transparency and Accountability

AEEGSI website is key to make available all information to every stakeholder, both on internal organization, objectives and processes. All provisions are also published on the website, caring to preserve confidential or sensitive data. The regulator extensively uses consultation procedures, such as Public Hearing, Written consultation, workshops, and Focus group by stakeholder groups (Permanent Observatory on Energy Regulation). In 2015 a number of 58 public consultations have been issued.

Adopting a wide communication plan, particularly devoted to raise consumer's awareness and to increase the knowledge about its activities, every year AEEGSI presents an annual report on its activities and main features of the regulated sectors to the Parliament. Regarding voting procedure, each Board member may express a single vote. Being five members, the Board may always express a clear majority.

7.11 EMRC (Jordan)

7.11.1 Legal status

Energy and Minerals Regulatory Commission (EMRC) is a governmental body that possess a legal personality with financial and administrative independence and is considered the legal successor of the Electricity Regulatory Commission (ERC), the Jordan Nuclear Regulatory Commission (JNRC) and the Natural Resources Authority (NER) in relation to its regulatory tasks according to law No. (17) for the year 2014 regarding the restructuring of institutions and governmental organizations.



7.11.2 Independence

a) Political & Legal Independence

EMRC is a separated entity who acts independently, although directly related to the Prime Minister⁸, while in some particular cases may be addressed in its decisions.

Obligations	Government	Parliament
Tariff Methodology	Х	Χ
Opinions on Security of supply issues	Х	Х
National Development Plans	Х	Х
Draft Budget	Х	
Annual Work Plan	Х	
Annual Activities Report	Х	Х

Table 7: EMRC Formal Obligations for Approval

The Regulator is managed and supervised by a Council called "the Council of Commissioners" which is constituted by five fulltime Commissioners including the Chief Commissioner and Deputy Chief Commissioner, to be appointed by the Council of Ministers upon the recommendation of the Prime Minister, and their salaries and remuneration and all financial rights shall be fixed by virtue of the appointment decision. Their appointment depends on specific requirements to be full filled such as a minimum numbers years of experiences and bachelor degree.

Commissioners must not have any financial interest in any business connected, either directly or indirectly to the regulated sector, not engaged in any related activity and are not spouse or relative of the first and second degree of a person who has such an interest or is engaged in such an activity, unless the Prime Minister is satisfied that the interest or activity will not interfere with the person's impartial discharge of his duties as a Commissioner. Moreover he must not be an employee with any of the licensees and has not worked for any of them during the year preceding the date of his appointment.

The term of a Commissioner is four years, except for the first Commissioners of which the Chief Commissioner and the Deputy Chief Commissioner are appointed for a term of four years, one of the Commissioner is appointed for three years and the remaining members are appointed for two years. The term of a Commissioner may be renewed for one time for a term of four years.

Unless expiration of his term or resignation, Commissioner may be terminated in any of the following cases:

- Loss of one of the membership conditions:
- Being absent from three consecutive or six non-consecutive meetings per year for reasons within his control and not acceptable to the Council;
- The inability to perform his duties for mental or physical reasons;
- To be sentenced with a criminal or misdemeanor penalty breaching honor such as bribery, embezzlement, theft, forgery, misuse of trust, false affidavit or any other crime

⁸ Temporary Law No. (64) for the Year 2003, General Electricity Law, art. 5, 6

⁹ Temporary Law No. (64) for the Year 2003, General Electricity Law, art. 8



that is contrary to public morals, or otherwise to be declared bankrupt unless his standing is restored;

• To be dismissed pursuant to the illegal diffusion of confidential information.

Staff members are recruited via open call.

b) Financial Independence

EMRC is financially independent by Government budget, being funded by license fees and fines which are set autonomously to match financial needs. The same independence occurs in managing the financial resources, even if the Government must approve the annual budget and must be compliant with rules and\or guidelines arising from the state budget. The accounts in addition to its budget are audited in accordance with the international accounting standards by a certified legal auditor to be appointed by and whose fees are determined by the Council.

c) Functional Independence

The regulatory decisions are binding, but may be appealed to Supreme Court. In such cases, the decision is suspended until the final decision.

7.11.3 Competences

a) Information Access

EMRC have access to all information as stated in the terms and conditions of the licenses

b) Security & Quality Of Supply

EMRC monitors the development of the energy sectors, both for generation and for networks developments and maintenance and actively provide to cover the peak of the demand. The regulator aims at regulating the sector on the basis of balance between the interests of the consumers, licensees, investors and any other relevant parties. EMRC also works on ensuring the provision of safe, stable, ongoing, quality and adequate services while ensuring the compliance of enterprises working in the sector with the standards of environmental protection instructions and laws and the general safety conditions applicable in Jordan.

c) Market Opening and Market Monitoring

EMRC monitors the sector in the Kingdom in regard to progression of the single buyer model to a competitive electricity market and to report each year on the potential for competition to the Minister. To this extent, the Council consults the licensees, consumers, potential investors and other interested parties and obtain their views on the subject. These reports present the Council's analysis and recommendations as to whether the Jordanian electricity supply industry has developed to the point where a competitive electricity market, based on bilateral trading arrangements between the generation licensee on the one hand and the distribution licensee or the supply licensee or the principal consumers on the other hand, and amongst distribution and supply licensees, ought to be established, having regard to:

- the extent of existence of a sufficiently large number of potentially competitive entities, to the extent that the likelihood of an abuse of market power can be managed;
- the extent of existence of necessary metering and information technology infrastructures required for the operation of a competitive electricity market;
- the financial viability of the sector; and
- the impact of competition on the prices payable by consumers.

The Minister present to the Council of Ministers the report submitted by the Council. When the Council of Ministers is satisfied that the sector has developed to the point where a competitive electricity market may be established, the Council of Ministers may issue a declaration that a competitive electricity market is to be initiated, and the Council of Ministers may authorize the



Minister to take such steps as may be necessary for establishing the arrangements to implement the competitive electricity market to be adopted.

d) Tariff Setting

The Council determines the tariffs/prices for licensed services, according to methodologies it adopts for regulating electricity prices, and such tariff methodologies are specified in the license of the licensee. Generation's tariff are determined in accordance with the arrangements entered into by the bulk supply licensee with the generation licensee. When determining the tariff methodologies, the following are taken into consideration:

- allow a licensee that operates efficiently to recover the full costs of its business activities and to earn a reasonable return on the capital invested in business;
- provide incentives for the continued improvement of the technical and economic efficiency with which the services are provided, and for the continued improvement of quality of services;
- give to consumers economically efficient signals regarding the costs that their consumption imposes on the licensee's business;
- avoid undue discrimination between consumers of the same category and consumer categories; and
- gradually phase out or substantially reduce cross subsidies, except while providing lifeline tariffs.

The Council takes into account any subsidy, whether direct or by way of favorable financing terms, or in any other manner, other than cross-subsidy, in establishing its tariff methodologies.

The Council shall establish tariff methodologies that reflect the terms and conditions of the initial privatization contracts, initial IPP contracts and any contract that the Concession Company may enter into with the bulk supply licensee. In establishing tariff methodologies, the Council may allow a lifeline tariff for some consumers who require such a tariff due to their living conditions. Before establishing a tariff methodology, the Council shall grant an opportunity to the licensee to make representations in accordance with such procedures as may be established by the Council pursuant to a directive.

e) Licensing

EMRC grants permits and licenses persons to construct, own or operate an undertaking or in any way engage in the business of generation, transmission, system operation, supply or distribution. The License include the tariff methodology applicable to the licensee and approved by the Commission. A generation licensee shall construct, own, operate and maintain a power station for purposes of generation of electric power and to sell electric power and ancillary services.

A transmission licensee shall carry out construction, operation, and maintenance of transmission system and the provision of non-discriminatory access to the users of the transmission system. The license for system operation shall carry out generation scheduling, commitment and dispatch, transmission scheduling and generation outage co-ordination, transmission congestion management; scheduling the procurement of ancillary services; carrying out necessary studies for the operation of the transmission system and the assurance of its continuity and reliability.

A bulk supply license, the licensee shall: purchase electric power from generation licensees and sell it to a retail supply licensee, carry out studies for long term system planning and ensure the availability of additional generation capacity to meet expected demand. A retail supply licensee shall exclusively purchase electric power from a bulk supply licensee or an embedded generation station and resell it to consumers in a specified area. A bulk supply licensee and a retail supply licensee shall procure electric power from power stations with installed capacity of



5 MW or more in aggregate at a site by virtue of a competitive tender as specified in the license, unless the Commission allows or requires an alternative method, provided that the contracts for procurement of electric power under the initial privatization contracts entered into by a generation licensee or its legal successor or under the initial IPP contracts shall be deemed to have been done in a competitive manner for the purpose of this Article.

The transmission licensee shall be the sole bulk supply licensee pursuant to a bulk supply license until such time as the Council of Ministers decides on the introduction of a competitive electricity market. A distribution licensee for a specified area shall be the sole retail supply licensee for that area pursuant to the retail supply license granted to him. EMRC verifies the compliance of permittees and licensees with the application of the provisions of the laws, regulations and issued related instructions. Moreover it monitors the permittees and licensees with a view to ensure the compliance thereof with the provisions of the laws and the permits and licenses granted thereto, for which purpose it may make inspections to any entity or any other body. It may modify licenses, impose a fine on licensees for infractions, report and announce infractions for violations of terms and conditions of licenses.

f) Dispute Settlement

EMRC can settle disputes that arise between licensees if the contracts signed between them permits the same or if they agree to refer such disputes to the Council, and it shall settle disputes that arise between licensees and consumers involving matters of connection and supply of electric power, quality of service and electric tariffs, and the decision of the Council on such disputes shall be subject to appeal to the High Court of Justice. The Council may review its decisions and revoke them, at its own initiative or upon the request of any of the parties involved in the sector and aggrieved by the decision, and the final decisions of the Council with this respect may be challenged before the High Court of Justice.

g) Unbundling

EMRC is currently taking necessary actions in order to grant the National Electric Power Company a license to practice the activity of the electric transmission, bulk supply and the system operator. EMRC is also working on the procedures for approving the codes which are still under revision for the field of electricity transmission with a view to cover the activities to be practiced by the National Electric Power Company under the licenses to be granted thereto. In any case who is owner of licensee for generation or distribution may not hold a license for transmission.

h) Technical Competences

Participating in developing the technical standard specifications related to the sector appliances' and facilities in consultation with other stakeholders in order to issue the same by Jordan Standards and Metrology Organization.

i) Consumer Protection

It aims at attending to protect the interests of consumers, provided that they comply with the terms set by the licensees with the consent of the Commission for providing electricity service. to ensure that the regulation of the sector is fair and balanced to consumers, licensees, investors and other stakeholders. Regarding vulnerable consumers, EMRC defines policies to support them such as specific tariffs, also in cooperation with Ministry and Consumer protection agency.

Consumers are also addressed with a number of tools to inform them on the rights, to manage their complaints and they also have tools to check and monitor energy prices. Quality of the services provided to consumers is monitored and eventually enforced to networks licensees.

7.11.4 Internal organization

According to the funding Law, EMRC is autonomous in defining its organization, number of staff



members and managing human resources policy. EMRC works in the field of planning, development and human resources management had expanded to include all employees of the Energy and Minerals Regulatory Commission.

A new organizational chart had been approved which consists of 16 directorates and operating units, while 3 directorates for oil, gas, petroleum and oil shale were created which shall be activated upon mandating EMRC with the task of regulating these sectors. In 2014 the strategic plan of EMRC for 2015-17 had been endorsed along with endorsing the vision, mission and core value and adopting a logo for EMRC which reflects the reality and future duties of EMRC.

Due to expansion of EMRC duties, it worked on appointing qualified human resources where 11 employees in various specializations were appointed; further, coordination had been made with the Civil Service Bureau for completing the procedures of appointment another 10 employees and filling 30 vacancies. Presently EMRC has 370 employees, with 160 Engineers & technicians and 210 Administration financial and others employees.

Staff Members are selected with examinations and final appointment is in charge of the Council who may remove, apply penalties and incentives. Terms and conditions for employees are the same for all public sectors, while salaries are lower than energy sectors similar positions and scaled according professional experience and background. A code of ethics has been adopted, which is binding all of the staff.

The last approved budget is 6 million and 866 thousands euro in 2015.

In 2014, the capacity of the internal communication network had been increased in order to adapting the employee computers for internet connectivity and emails. All financial and administrative systems were upgraded to observe the big growth in the number of employees after forming the Energy and Minerals Regulatory Commission.

7.11.5 Enforcement

The Council may verify if the licensee is carrying out its obligations under any legislation¹⁰, in addition to his compliance with the Codes of Conduct, or the terms and conditions of the license. Where the Council determines that the license ought to be cancelled the Council shall notify the licensee its intention to cancel the license concerned and the reasons for doing so, and shall allow the licensee an opportunity to demonstrate that he has taken measures to remedy the events complained of by the Commission.

If the licensee has not remedied the events complained of, the Council cancel the license, ordering to sell or transfer the undertaking of the licensee and to take interim arrangements pending sale of the licensee's undertaking. The Council may allow the license to remain in force provided it is amended with further terms and conditions as it may deem necessary to impose, and such amendments shall form part of the license.

Where the Council is satisfied that a licensee has contravened any of the conditions of the license, the Council may serve upon the licensee an order requiring it to rectify the contravention of the license within a defined period. Before, the Council shall inform the concerned licensee the grounds upon which an order is proposed to be issued and afford an opportunity to the licensee to make a representation against the same. An order may specify a penalty for each day that the licensee subjected to the order is in default of compliance with it (such penalty may not exceed one thousand Jordanian Dinar per day for the first contravention, and three thousand Jordanian Dinar per day for subsequent such contraventions).

¹⁰ Temporary Law No. (64) for the Year 2003, General Electricity Law, art. 39 & 40



7.11.6 Transparency and Accountability

Many information are reported in the Annual Report (published on the website) with detailed information on Mission ("To become a pioneer in regulating and developing the sector of energy, minerals, and radiation and nuclear applications in a peaceful, safe and sustainable manner"), vision ("To ensure a secure and sustainable services, durable and of high quality, affordable, through advancing regulation, supervision, and competition in the energy and minerals sector, and the uses of nuclear energy and ionized radiation in peaceful areas to ensure the interests of consumers and investors") and core values (Transparency, integrity and justice, Maintaining competitiveness, Teamwork spirit, Performance, Motivation, Quality control and assurance, Community Responsibility).

EMRC had recently modified the website¹¹ of the former Electricity Regulatory Commission so to contain information on the Energy and Minerals Regulatory Commission in Arabic and English. On the web site there are a number of information on main statistics of energy sector, tariffs, main regulatory decisions and documents such as Performance codes, Standard Licenses, procedures for applying licenses, Laws, etc. In order to engage stakeholders in the regulatory process, public hearings, written consultations, workshops and focus groups are used to consult stakeholders.

The Regulator, through the Minister, provides the Council of Ministers with the annual report of the Sector and publish the non-confidential decisions and the resolutions it issues, together with reasons for those decisions and resolutions as well as the annual report. Annual reports (also in English) are published and available on internet with a detailed description of all activities EMRC carried out (organizational chart, composition of the Council, financial statements, etc.). The Council issues directives determining the procedures for and the conditions of allowing the public to examine non-confidential documents available at the Regulator¹².

Regarding the voting procedure¹³, The Council adopts its resolutions by a majority vote of those Commissioners attending and in the event of an equality of votes, the side on which the Commissioner presiding the meeting has voted prevails. No Commissioner may abstain from voting and a dissenting Commissioner records his dissent in the minutes of the meeting.

7.12 REWS (Malta)

7.12.1 Legal Status

The Regulator for Energy and Water Services (REWS) was established by the House of Representatives on 31st July 2015 through the Regulator for Energy and Water Services Act (Act XXV) of 2015. The functions of the REWS are established by law and the REWS is responsible for the regulation of energy and water services in Malta.

7.12.2 Independence

a) Political & Legal Independence

REWS is independent entity separated by other public bodies and does not receive any direct influence by other entities, with clear clarity in its roles and functions. The regulator Board¹⁴

¹² Temporary Law No. (64) for the Year 2003, General Electricity Law, art. 27

¹¹ http://www.emrc.gov.jo

¹³ Temporary Law No. (64) for the Year 2003, General Electricity Law, art. 10

¹⁴ "Regulator For Energy And Water Services", Cap. 545 art. 3.



consists of a Chairman and not less than four and not more than six other members. The members of the Board are appointed by the Minister responsible for energy and water services for a term of five years or for such longer period as may be specified in the instrument of appointment subject to a maximum term of seven years but the members so appointed may be re-appointed, once only, on the expiration of their term of office for a term of five years or for such longer period as may be specified in the instrument of appointment subject to a maximum term of seven years.

An appropriate rotation scheme for the appointment of the members of the Board of the Regulator shall be put in place, in terms of which the end date of the term of office of the Commissioners is not the same for all members. In order to enhance the independence of the Board, Commissioners may be removed from office if found to be unable to act independently from any market interests or if a member is found taking instructions or directions from any other public or private entity in the exercise of the regulatory functions assigned to the Regulator.

Moreover staff and Commissioners are not allowed to be employed or any form of collaboration with regulated entities, while they can have interests in them or may be charged for political activities. The only formal obligation in front of the Government is the submission of the yearly budget which must be approved. The Minister may, in relation to matters that appear to him to affect the public interest, from time to time communicate to the Regulator directions in writing of a general character, not related to the regulatory powers of the Regulator; the Regulator gives effect to all such directions in such a manner as to respect, in particular, the provisions such that the independent regulatory powers of the Regulator are in no way prejudiced.

Staff members are selected with open call and hired if they are compliant with defined criteria. Both to Board and Staff Members, general rules of civil service apply when finishing their service within the Regulator. A cooling off period of two years is applicable, preventing to work in the regulated entities.

b) Financial Independence

The funding of the regulator derives from license fees which are set by law. Moreover, to ensure financial independence, REWS is autonomous in managing its own resources, even if the budget, whose process is established by law, must be approved by the Ministry and annually reviewed by external auditors. In any case, REWS's budget has been always approved in accordance to its needs.

c) Functional Independence

Regulatory decisions are legally binding for the operators of the regulated sectors. Anyway, against a regulatory decision, parties may appeal to Administrative Review Tribunal and Court of Appeal. In general, the effect of a decision to which an appeal relates does not, except where the Administrative Review Tribunal or the Court of Appeal may order, be suspended in consequence of the bringing of the appeal.

In the case of an imposition of an administrative fine, the appellant may request the Administrative Court (the Administrative Review Tribunal) to suspend the effects of the decision. The Regulator has to desist from issuing a fine until the request of suspension has been determined, withdrawn or otherwise dealt with. The Administrative Review Tribunal has to determine any requests for suspension expeditiously. Before determining any such request the Administrative Review Tribunal shall give the Regulator a reasonable opportunity to reply and make its submissions, within a period of not less than three working days.

7.12.3 Competences

a) Information Access

REWS has full access to financial information from sector participants (Accounts, operational details, agreements, personnel info, etc.) and to technical information form utilities.



b) Security & Quality Of Supply

The Maltese energy regulator provide to monitor medium and long-term supply and demand balance on the national market as well as expected future demand and envisaged additional capacity, quality and level of maintenance of the networks and quality of supply. This activity is carried out without taking any operational actions nor does REWS participate in any activities related to tender processes for new infrastructures.

c) Market Opening and Market Monitoring

Concerning the opening of electricity and gas markets, Malta has a derogation under Directive 2009/72/EC from the obligation to open the supply activity in the electricity market. There is no natural gas market yet in Malta since there are no gas infrastructures. In any case, REWS has an advisory role to comment on proposals, related to opening the markets. Moreover to collect information on market abuse and anticompetitive behavior is within REWS' competences, in close coordination with national Maltese antitrust authority. Other competences are to prohibit abusive practices affecting wholesale energy markets and in detecting and investigating market manipulation practices.

d) Tariff Setting

Concerning this crucial task, REWS has the power to fix:

- Methodologies used to establish transmission and distribution network tariffs;
- Transmission and distribution networks tariffs;
- The methodologies for the provision of balancing and ancillary services;
- Access to cross-border infrastructures.

Before defining the tariffs, REWS bases its decision on consultations and data, in order to provide an evidence based regulation. This regulation is structured aiming to be cost-reflective and to incentivize efficient performance of distribution networks. In case of non performing management, REWS is allowed to reduce the return on investment through the tariffs. In particular to the petroleum market, REWS establishes maximum price markup mechanisms.

e) Licensing

REWS issues the licenses, determining terms and conditions, reviewing and monitoring compliance with the terms and conditions. These actions may allow REWS to impose a fine on licensees for infractions, reporting infractions for violations of terms and conditions of licenses.

f) Dispute Settlement

REWS is responsible for dispute settlement between industry and customers as well as between industry operators. REWS may also receive complaints against distributors, with particular regard to Grid access, Third party access and Cross-border dispute.

g) Unbundling

The regulatory authority acts in accordance to EU Directives in setting guidelines to separate accounts and to allocate costs. There is no national or EU obligation on Malta to unbundle DSO and TSO infrastructures. REWS moreover sets guidelines for compliance review and for reporting obligations, as well as imposing to modify accounting practices wherever there is insufficient unbundling.

h) Technical Competences

REWS has a wide range of competences related to network regulation such as:

- management and allocation of interconnection capacity;
- operational and planning standards including schemes for the calculation of total transfer capacity;



- guidelines for congestion management;
- grant exemption/s for third party access for new investment.

The Regulator defines also quality of services standard, and may sanction or intervene in case of noncompliance. Regarding investment planning and cost recovery, REWS provides opinion to Government on development plans.

i) Consumer protection

One of the main objectives of the regulator set by means of its Act of establishment is the responsibility for the regulation of ensuring greater focus on and increased consumer protection. REWS is legally obliged to promote the interests of consumers and other users in Malta, particularly vulnerable consumers, especially in respect of the prices charged for, and the quality and variety of the services and, or products regulated by or under the REWS Act. Vulnerability issues are also addressed via social policy.

7.12.4 Internal organization

REWS is completely independent in deciding the Regulator's organization. The affairs and business of the Regulator are its own responsibility and the executive conduct of the administrative control of its officers and employees, is the responsibility of the Chief Executive Officer of the Regulator.

The Regulator may establish Directorates, Units, Divisions and Sections, as appropriate, which are vested with such responsibilities as the Regulator may decide as it deems appropriate. Regarding human resources policy, the Board is the final decision maker to select, appoint, remove or set penalty for staff members. Their terms, conditions and salaries are in line with whose of national civil servants.

The present staff complement of the Regulator is 41 made up as follows:

- Non-Executive Board: 6
- Office of the CEO: 6
- Regulation and EU Affairs Unit: 6
- Compliance, Licensing and Enforcement Unit: 19
- Finance and Unit: 4

There is not a specific IT infrastructure to collect data from regulated entities, but REWS may require any person or authorized provider to provide it with any information, including financial information, that REWS considers necessary. Who fails or refuses to provide such information shall be liable to the imposition of an administrative penalty as may be prescribed by REWS.

Regarding the budget, considered as consistent with REWS costs to perform its institutional activities, in 2017 it is estimated around 2.6 million €, with 50% devoted to salaries and 3,5 % to IT expenses.

For the time being, there is not a specific code of conduct for board and staff members. However, the Public Service Management Code applicable to the civil service and applicable to the wider public service is applicable to REWS public officials. The members of the Regulator and all officers and employees of the Regulator are deemed to be public officers within the meaning and for the purposes of the Criminal Code.

7.12.5 Enforcement

According to Electricity Market Law 25(1) and the REWS Act, the Regulator has the power to impose fines and sanctions to regulated entities. The Regulator may impose an administrative penalty upon who infringes or fails to comply any provision, directive or decision given by the



Regulator or under any other law which the Regulator is entitled to enforce, and who fails to comply with a legally-binding decision of the Agency for the Cooperation of Energy Regulators, or who fails to comply with any condition of any authorization granted under REWS Act.

REWS may revoke or modify an authorization when the conditions for authorization are no longer met by the service provider. Decisions shall be adopted by a simple majority of the votes of the members present and voting. The Chairman has an initial vote and in the event of an equality of votes, a casting vote. No decision shall be valid which is not supported by at least two members of the Regulator.

7.12.6 Transparency and Accountability

The institutional website¹⁵ contains all relevant information on REWS such as its Mission Statement ("To regulate and monitor the efficient production and use of water and energy to guarantee a safe, secure and sustainable service for the benefit and welfare of the consumer"), vision ("A dynamic and fluid organization, working for and with stakeholders for the sustainability and affordability of energy and water services") and values ("Honesty, Transparency, Integrity, Nondiscrimination, Professionalism").

The website offers the main communication platform to all stakeholders: consumers, regulated operators, service providers and the general public. The website contains a myriad of information including decision notices issued by REWS and its predecessor, the Malta Resources Authority, ongoing public consultations, calls for tender offers, reports on activities carried out by REWS, applications and guidance for submissions of applications for authorizations, licenses and permits issued by REWS as well as information related to energy and water efficiency schemes administered by REWS.

Particularly, REWS undertakes effective stakeholder and regulated entity involvement and consultation when preparing its positions and actions. The consultations offer the possibility to submit also written opinion and contributions. After the end of each financial year, REWS makes and transmits to the Minister and to the Minister responsible for finance a report dealing generally with the activities of the Regulator during that financial year and containing such information relating to the proceedings and policy of the Regulator. The Minister causes such report to be laid on the Table of the House of Representatives.

7.13 REGAGEN (Montenegro)

7.13.1 Legal Status

The Montenegro Energy Regulatory Agency (REGAGEN) was established on January 22, 2004. REGAGEN is by law set up as an institution legally distinct and functionally independent from any other public entity. The establishment of REGAGEN is solely based on legislation, which means that the regulatory authority cannot be liquidated by act of another public institution. REGAGEN is responsible for electricity and gas market regulation. Since August 2016, in accordance with Article 3 of the Law on Utility Services ("Official Gazette of Montenegro", No. 55/16 of 17.08.2016), regulated utility services under the competence of the Energy Regulatory Agency (ERA) are public water supply and wastewater management.

7.13.2 Independence

a) Political & Legal Independence

¹⁵ https://www.rews.org.mt/#/en/home



The Energy Regulatory Agency (REGAGEN) is the single authority for regulating the energy sector in Montenegro. REGAGEN is headed by a board consisting of two members and a president as well as an executive director and a deputy executive director. In line with the Third Energy Package the term of the Commissioners is limited to a period of five years, renewable once, and a rotation scheme is in place.

Terms of office for the chairman and Commissioners are fixed 2 mandates maximum. The chairman and Commissioners cannot be dismissed before their term expires unless they have criminal record and ailing health problem. According to law, members of the Board of the Agency, Director, Deputy Director, as well as members of their immediate family shall not be managers and shall not have material, financial or other interest in an undertaking in the energy sector. In case of violation, they will be removed.

b) Financial Independence

The Agency is funded from license fees, annual charges for use of licenses for carrying out energy activities and charges for dispute resolution that the Agency sets pursuant to the Energy Law. The amounts of licenses fee are set by the decision, based on the adopted financial plan of the Agency. The decision is made annually and relates to two energy sector areas, electricity and oil and gas.

The funds necessary for the financing of the Agency are set by the annual financial plan adopted by the Parliament of Montenegro. The ministry has no influence on the formation of the budget. The implementation of budget is supervised by State Auditor Institution.

c) Functional Independence

The decisions of REGAGEN can be appealed to the administrative courts and while appealing, the contested decision remains in effect pending appeal.

7.13.3 Competences

a) Information Access

REGAGEN's mission is to regulate electricity and natural gas markets and to ensure the efficient and sustainable operation of the respective markets by guaranteeing consumer rights and respecting environment. In this regard, REGAGEN has full access without any limitation to the financial information from sector participants and technical information from utilities. So far REGAGEN has not encountered any problem concerning information access.

b) Security & Quality Of Supply

REGAGEN sets minimum quality of supply, including as follows:

- quality of service, specifically regarding the time taken by transmission and distribution system operators for electricity and gas to make connection and repairs;
- continuity of supply;
- voltage quality for electricity and quality of gas.

REGAGEN doesn't participate in the implementation of measures to cover peak demand and to address any shortfalls of one or more suppliers since TSO and MO are obliged to do it. The regulator plays a role in prohibiting abusive practices affecting wholesale energy markets and in detecting and investigating market manipulation practice.

c) Market Opening and Market Monitoring

Market opening is an important feature of the energy markets which increases competition and correspondingly the service quality and customer satisfaction. National timetables for a fully open electricity and natural gas market were determined. However, REGAGEN doesn't play a role in identifying the timetable of market opening.



Regarding matters related to competition, Montenegro has adopted a Competition Law in 2012. Its provisions are to a large extent in line with the EU acquis on competition. The authority in charge of enforcement is the Agency for Competition Protection (ACP). However, since its establishment, there has been no case of applying competition law to the electricity or gas sector, except for the review of three mergers.

d) Tariff Setting

The significant role of the Agency in the regulation of electricity prices is reflected in the establishment of acts governing this segment of the regulation, and:

- methodologies for setting of prices, terms and conditions for:
 - use of electricity transmission and distribution systems,
 - use of gas storage systems, LNG and LPG facilities,
 - provision of ancillary and system services and balancing services for electricity and gas transmission systems;
- methodologies for setting of prices for use of transmission or distribution system paid by users of direct line connected to the transmission or distribution system;
- methodologies for setting of regulated tariffs for tariff customers and customers by regulated tariffs for electricity or gas supplied by public supplier;
- rules to modify tariffs at the request of entity or by the Agency,
- rules for settlement of difference between justified and realized revenues and approved costs between individual distribution system operators;

The Energy Law gives the Agency authorizations to approve:

- regulated tariffs for electricity or gas supply to tariff customers and tariffs for supply to
 eligible customers that are supplied by a Public supplier, and that may be also offered by
 other suppliers to eligible customers
- tariffs applied by a supplier of last resort,
- tariffs for use of LNG and LPG facilities,
- charges for removal of congestions on identified entry or exit points in the gas transmission system, that is a part of price (tariff) for transmission and transit of gas, and
- charge for operation of market operator.
 - e) Licensing

Regarding this competence, REGAGEN:

- Issues rules on the manner and conditions for issuing, modification and revoking of licenses;
- Issues, modify and revokes licenses;
- monitor activities of energy undertakings in regards to compliance with terms and conditions set by the license;
- make annual decisions on setting of fees for licenses;
- maintain a register of issued and revoked licenses.
 - f) Dispute Settlement

The Agency decides about complaints relating to:

• an act of the transmission or distribution system operator about denial of access, i.e. connection to transmission or distribution system;



- terms and conditions from a connection consent;
- calculation of electricity volumes in the event of unauthorized consumption;
- final customers in case of suspension of delivery of electricity or gas.

In addition to deciding on complaints as an appellate body, the Agency is authorized to resolve disputes between energy undertakings or between energy undertakings and users of their services, arising from their contractual relations set in accordance with the law, if the contractual parties entrust the settlement of disputes to the Agency.

g) Unbundling

REGAGEN plays a role with respect to utility unbundling however it doesn't have the duty to establish guidelines on how separate accounts should be drawn up for unbundled entities and to draw up guidelines for compliance review and for reporting obligations regarding the unbundling process.

h) Technical Competences

REGAGEN has the power to approve rules regarding the management and allocation of interconnection capacity, operational and planning standards including schemes for the calculation of total transfer capacity and to grant exemption/s for third party access for new investments.

On the other hand REGAGEN can only approve to issue secondary legislation, including market rules, grid codes and other technical rules and to define metering rules and charges, and does not require that transmission and distribution operators correct any congestion difficulties. In terms of quality of service standards and congestion management rules, REGAGEN has the ability to set and approve both of them. However, REGAGEN does not have the power to enforce sanctions in cases of violations of such service standards but it has power to submit it to the relevant body.

i) Consumer Protection

According to Article 41 objectives of the REGAGEN are to providing benefits for final customers through efficient functioning of market, promoting competition and protection of final customers. Article 48 prescribes that Regulator supervises and analyses operation and business activities of all energy undertakings and in case to identify irregularities in operation or acting of the undertaking contrary to the customers' protection and safety, shall inform the authority competent for competition or customers' protection.

REGAGEN doesn't have the power to address the needs of vulnerable consumers since vulnerability issues are addressed by Ministry and Consumer Protection Agency. The regulator has the power to monitor the time given to the sector participants to make connections and repairs; however, it cannot intervene if it exceeds the given time and if applicable and sanction sector participants.

7.13.4 Internal organization

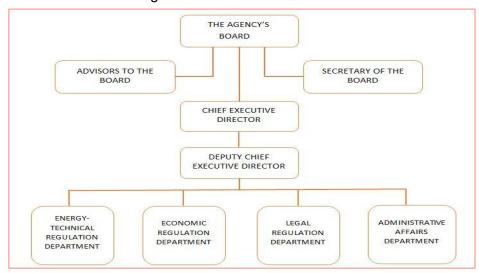
According to its Statutes, REGAGEN can decide on its own internal organization as well as its human resources policy. Unlike other MEDREG Members, Director's jurisdiction is the final decision-making authority for the selection and appointment of staff members and for the removal and setting penalties and incentives for them instead of regulatory board. All staff is bound by a code of ethics.

Salaries for Board members and staffs are established according to the criteria similar to that of public officials set by law. Terms and conditions of employees are the same as those of national civil servants. As of April 13, 2017 REGAGEN consists of 29 employees, mainly graduates of engineering, economics and law. REGAGEN's budget for 2016 was € 1.442.486, 32 million, %59, 31 of which was dedicated to salaries in gross amount. The rate of budget per consumer



is € 3,94.

Organization Chart of REGAGEN



7.13.5 Enforcement

REGAGEN does not have the power to sanction sector participants. It also cannot publish comparative reports demonstrating insufficient performance by the network operators and cannot revise tariffs or reduce rates of return in response to violations. The Board is composed of three members so that Board always ensures a clear majority.

7.13.6 Transparency and Accountability

All information on the regulatory agency such as its missions, duties, reports are made available to sector participants. Moreover, all decisions of the regulatory agency are ensured to stakeholders while taking into consideration of protecting sensitive commercial information. On the other hand, REGAGEN consults on draft decisions with tools such as public hearing and written consultation before taking its final decisions.

REGAGEN issues an annual report about its activities and it is required to appear annually before the parliamentary committee. The regulator publishes all relevant information related to all sorts of regulatory issues and practices such as licensing, tariffs, market monitoring data and etc. on its website. However English version of it currently is not available. REGAGEN has facilitated a communication strategy.

7.14 ANRE (Morocco)

7.14.1 Legal status

Law No.48-15 (the "Law") of 2016 establishes a National Authority for the Regulation of the Electricity Sector (*Autorité Nationale de Régulation du secteur de l'Electricité*, "ANRE"). The Law has been enacted by the Dahir No.1.60.60 dated 24 May 2016 and published in the Official Gazette in June 2016. ANRE is set to assume direct responsibilities for the Moroccan electricity sector within 2017. Until ANRE becomes functional, responsibility for the electricity sector is divided at the Government level between the Ministry of Energy, Mines, Water and Environment (MEMEE), which has oversight over the incumbent ONEE (Office National de l'Electricité et de l' eau potable), and the Ministry of Interior (MI), which supervises the overall performance of public enterprises responsible for the distribution of water and electricity in large urban areas.

MEMEE's Electricity Directorate is primarily responsible for developing policy in the electricity



sector in consultation with ONEE. It also seeks input from the Moroccan Agency for Solar Energy ("MASEN") and the National Agency for the Development of Renewable Energy and Energy Efficiency (Agence Nationale pour le Development des Energies Renouvelables et de l'Efficacité Energétique - "ADEREE"), regarding RES and energy efficiency. As ANRE is anticipated to take over the regulation of the energy sector shortly, the next paragraphs focus on a presentation of ANRE, its competences and structure according to law No.48-15/2016.

7.14.2 Independence

a) Political & Legal Independence

The law provides for ANRE to have the status of an administrative independent authority. The governance of ANRE is carried out by three bodies: the President, the Council and the Dispute Resolution Committee. The President is appointed according to the currently applicable legislation. However, the criteria and procedures for his/her selection are not specified in the law.

The Council of ANRE comprises nine (9) members and the President. Three (3) members are appointed by a decree, the first due to his/hers competence in judicial/legal matters, the second due to his/hers financial expertise and the third due to his/hers competence in technical issues related to the electricity. Three more members are appointed by the President of the House of Representatives on the basis of their competence in the legal, economic matters or depending on their competence in the electricity sector. The remaining three members are appointed by the President of the Chamber of Advisers. Again, the law provides that the appointments are dependent on the competence of the applicants in economic, legal or technical matters related to electricity. The time in office for all members is six (6) years and their term is renewable once.

The Council adopts the general policy of ANRE, approves the rules of procedure and ANRE's organizational structure. Following a proposal from the President, the Council also approves the general remuneration system and benefits for ANRE staff, including pensions and social security.

The Council also approves the directors of ANRE and the annual budget and adopts ANRE's annual reports. The law states that members of the Council may be removed only when they commit serious misconduct in the performance of their duties or when they obtain a governmental position or have any direct or indirect interests in a company active in the energy sector.

The law states that the members of the Council and the Dispute Settlement Committee shall exercise their functions with complete independence and impartiality. The annual report of ANRE is debated in front of the Parliament

b) Financial Independence

The law provides ANRE with financial autonomy. In Article 44 it is clearly stated that "The provisions of the legislation on the financial control of the State Public enterprises and other bodies are not applicable to the ANRE". The nature of its resources is detailed under Article 39 as follows:

- A contribution proportional to the amount collected by the transmission and distribution operators through tariffs (including tariffs for the use of medium-voltage grids). The rate of the said contribution is fixed by the ANRE's Council.
- Other sources of income such as grants, if any, paid by the State, the proceeds of the monetary penalties, gifts and bequests, other income and miscellaneous income collected in accordance with the legislation and current regulations.
- The contribution paid by disputing parties to the Dispute Resolution Committee. The amount for this contribution is also fixed by ANRE's Council.



All expenses and receivables are approved by the President. Cash surpluses are deposited with the General Treasury of the Kingdom of Morocco. ANRE's annual budget and any modifications that may take place within the year are subject to approval by its Council. An external auditor, appointed by the Council, is responsible for the annual audit of ANRE's accounts.

c) Functional Independence

Actions for annulment of decisions taken by ANRE can be taken in front of the Administrative Court of Rabat. Disputes can be taken in front of ANRE's Dispute Resolution Committee.

7.14.3 Competences

a) Information Access

ANRE's level of access to ONEE's financial and technical information is unclear. ANRE is responsible for both the approval of the rules related to ONEE's unbundling of accounts and for the approval of transmission and distribution tariffs. Thus in principle, ANRE should be able to obtain access to both financial and technical information down to a significant level of detail. The Ministry's current level of access to ONEE's financial and technical information is also unclear.

b) Security & Quality of Supply

The law assigns to ANRE (article 18) the following responsibilities related to security and quality of supply:

- approval of the 5-year network development plan for the transmission system;
- monitoring of its implementation;
- approval of the quality indicators to be met by the electricity grid. ANRE is also
 entrusted to collect information related to quality of electricity supply and publish the
 relevant indicators in the annual report.
- c) Market Opening and Market Monitoring

According to the law (Article 18), ANRE shall ensure the smooth functioning of the free electricity market and will regulate the access of self-producers to the national electricity grid.

The state-owned, vertically integrated incumbent Office National de l'Electricité et de l' eau potable (ONEE) owns the complete transmission network and much of the distribution network and is the main retail supplier. Except for renewable energy produced under the framework of Law 13/09 and the surplus of auto producers¹⁶, ONEE acts as the single buyer in the sector and owns and operates an important share of the generation capacity. ONEE is also the single importer of electricity (which amounts about 18% of total in 2016) from Spain and Algeria. ONEE can give concessions to private operators with purchase guarantees. ONEE has signed 10 long term PPAs with Independent Power Producers of which 6 are under operation, and 4 under construction. These include coal, gas, wind and solar facilities¹⁷.

The following tasks, relevant to market opening and market monitoring, are entrusted to ANRE:

- Approval of the code for the national electricity grid (including rules for access).
- Approval and enforcement of the codes of good conduct.

http://www.iai.it/sites/default/files/iaiwp1505.pdf and http://dkti-maroc.org/wp-content/uploads/sites/61/2016/12/1.-Moroccan-electricity-sector-regulation.pdf

¹⁷ Source: http://www.energynet.co.uk/webfm_send/2025



d) Tariff Setting

The law foresees that ANRE:

- Approves the tariffs for the use of the national electricity grid (high voltage) including the tariffs for capacity bookings at the interconnection points
- Approves the tariffs for the use of medium-voltage

The law also provides some basic guidelines regarding the tariff methodology. For example it details that in fixing the tariff, ANRE takes into account the costs related to the development, operation and maintenance of the national electricity grid and that the costs include capital costs plus a fair return on investments.

Until the operation of ANRE, bundled electricity tariffs are determined by a decree of the Minister of Economic Affairs.

e) Licensing

ANRE issues an opinion on applications for new RES power plants and direct transmission lines.

f) Dispute Settlement

The law provides for a Dispute Settlement Committee to operate as a separate body within the Regulator. Three members appointed for a mandate of 3 years renewable only once:

- A magistrate, appointed by the Supreme Council of Judicial Power, is acting as the committee's Chairman.
- Two members are appointed by the Council, upon the proposal of ANRE's President.

All disputes, including disputes related to access to interconnection points, are brought up in front of the Dispute Settlement Committee.

g) Unbundling

ONEE has not been unbundled and performs the functions of energy production, imports, supply, transmission and distribution as a single vertically integrated company. The law provides for ANRE to approve parameters and rules for the unbundling of accounts of the vertically integrated incumbent.

h) Technical Competences

The law assigns to ANRE full capacity to approve rules regarding access and tariffs to the electricity transmission system including interconnections, to approve indicators quantifying the quality of electricity supply and to approve multiannual investment plans related to infrastructure. ANRE also provides an opinion for the authorization of new power plants.

Further, ANRE, may, on the authorities' own initiative or at the request of the Government, propose draft legislative and regulatory texts related to the electricity sector, carry out studies and proceed in the publication of any information relevant to energy sector stakeholders including customers. ANRE may also issue an opinion regarding the price of energy to be sold to consumers.

i) Consumer Protection

Over the past 5-7 years, Morocco has proceeded in significant reforms towards the removal of energy subsidies for most fuel products (diesel, gasoline, and kerosene) and also for



electricity¹⁸. Social programs targeting the most vulnerable population groups were expanded. These programs however are rather of a more general nature (i.e. support for school-aged children, subsidized medical expenses for the poor, and increased funding for public transportation) rather than focused on energy poverty. Vulnerable electricity customers are not specifically defined. ANRE is not allocated specific tasks related to consumer protection.

7.14.4 Internal organization

The ANRE is staffed by officials seconded from other administrative authorities and staff recruited by in accordance with its staff regulations. ANRE can call on contractors for specific missions within the framework of a standard contract adopted by the Council and for a period not exceeding two years, renewable once.

7.14.5 Enforcement

The law foresees that ANRE is authorized to carry out on-the-spot checks to ensure that compliance of the entities it supervises with the laws and regulations applicable to their activities. Enforcing powers however are unclear.

7.14.6 Transparency and Accountability

ANRE's annual report is submitted to the Parliament and is subject to debate.

The following are published in the Official Bulletin:

- the tariff for the use of the national electricity grid;
- the tariffs for the use of the medium-voltage power grids;
- the opinions on dispute settlement issues;
- the annual activity report of the ANRE.

7.15 PERC (Palestine)

7.15.1 Legal status

In line with the Law No. 13 (issued in 2009) of the General Electricity Law and upon the recommendation of the Council of Ministers, Mr. President of Palestine issued a decree (issued in Feb. 2010) to appoint the members of the first Board of Directors of the Palestinian Electricity Regulatory Council (PERC) announcing the start of reorganizing the electricity sector in Palestine, through the formation of a council to regulate and to monitor all activities of the electricity sector; production, transportation, distribution and sales.

The Palestinian Electricity Regulatory Council PERC is a council that regulates and monitors all activities of the electricity sector; production, transportation, distribution and consumption.

PERC is founded to ensure the provision of electric power and guarantee continuity to meet the requirements of the various uses at reasonable prices while preserving the environment and taking into account the interests of consumers, producers, transporters and distributors of electrical energy, and work on preventing monopoly in all the activities of generation and distribution in the power sector.

¹⁸ Source: International Monetary Fund, Programme Note on Morocco (2016) https://www.imf.org/external/np/country/notes/morocco.htm



PERC has a clear vision that states the following:

"To regulate the Palestinian electricity sector to ensure that it is modern and regulated. PERC is also set to serve the Palestinian community and protect their rights of obtaining a safe electrical service that is uninterrupted at affordable prices. This is to be done without prejudice and by balancing the interests of producers and distributors of electric power". PERC has a huge platform of roles and responsibilities and the following are some of the main roles:

- Monitor the activities of Generating, Transmitting, Distributing &Selling of Electrical power within the framework of abiding by Laws, Rules & Regulations in force;
- Setting the conditions to ensure fair competition regarding production and distribution activities of electrical power to guarantee the interests of the consumers;
- To work on resolving disputes between Discos and customers, and between Electricity Sector companies with each other in order to maintain the public interest. PERC has mandatory duties to perform in the electricity sector such as Regulatory, Operational, Quality Control, Monitoring KPIs and Public interactions rules and duties.

7.15.2 Independence

a) Political & Legal Independence

In line with the decision-Law No. 13 of the General Electricity Law and upon the recommendation of the Cabinet, Mr. President of Palestine issued a decree to appoint the members of the Board of Directors of PERC. According to the general electricity law PERC:

- Is an independent entity (Financially and administratively) free of ministerial boundaries;
- has a separate budget according to the cabinet decision in its meeting #(16/20.).
- occupies one floor in the premises of Energy and National Resources Authority with a plan to relocate within 2 – 3 years;
- The board is made of 7 members, including the chairman, 4 of the members are ministries representatives. (Finance, Energy, Economy, Local Government) and 3 are representatives from the private sector. All of them are nominated by the Cabinet to the President after a recommendation from the Ministry.

PERC recommends its decisions to the Palestinian Energy Authority, a governmental body which in turn gets approval of the cabinet.

Obligations	Government
Tariff Methodology	X
Opinions on Security of supply issues	X
National Development Plans	X
Draft Budget	
Annual Work Plan	X
Annual Activities Report	Х

Table 8: PERC Formal Obligations for Approval

b) Financial Independence

PERC is funded through annual subsidy paid by the Ministry of finance. Since there is some conflict in the articles of the general electricity law, PERC cannot use the licensing fees of the distribution companies and these fees must be transferred to General Treasury Account. PERC asked the cabinet to amend the law so that licensing fees will be directly received by PERC.

c) Functional Independence



The decisions of PERC can be appealed for review.

7.15.3 Competences

a) Information Access

PERC has full access to financial and technical information from sectors participants and from utilities through extensive data flow that is mandatory requested to regulated bodies.

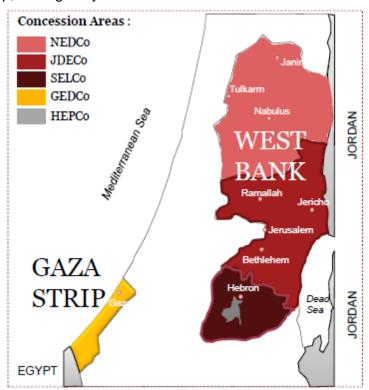
b) Security & Quality Of Supply

PERC is not fully competent on quality and level of maintenance of the networks as well as quality of supply. It defines indicators and standard and may impose fines and penalties.

c) Market Opening And Market Monitoring

West Bank and Gaza Strip are currently divided into four concession areas, as illustrated on the bellow map. Concession areas are managed by electricity distribution companies and municipalities, as detailed below:

- Northern area, which is managed by NEDCO, and other municipalities and local councils which have to join NEDCO according to the General Electricity Law no 13
- Central area is only managed by JDECo.
- Southern area, is managed by SELCo and other municipalities as well as the city of Hebron and City of Halhul, managed by HEPCo. They are planned to join and form SEDCo.
- The Gaza Strip, managed by GEDCo.



These distribution companies whose role is to pool the electricity demand of customers and handles the delivery of the electrical current directly to the end customer, considered regulated and is a natural monopoly Regulatory Framework since according to the General Electricity Law no 13 each licensed company has the concession to distribute electricity to a specific geographical area.



d) Tariff

PERC is responsible for reviewing tariffs annually in order to match interest of customers and companies and providing monopoly and price control of one party over the other:

- Issuing new connection fees which are more comprehensive, fair and based on unified and standardized estimates that are technically suitable and ideal.
- Ensuring that all licensees and all electricity distributers are applying the unified and official tariff.
- Reaching fair and suitable purchasing price of electricity from the suppliers (IEC, Jordan and Egypt).
- Control the tariff in the case of local electricity generation which complies with market rates and with interests for all stakeholders: Generators, Suppliers, transmitters, Distributes and Consumers.
- The transformation in Tariff methodology by the end of 2016 to become an Incentive based process rather than the existing methodology which is based on a Cost-Plus process.

e) Licensing

PERC regulates distribution companies and ensures their commitment to the licenses' terms as well as ensuring that they maintain proper technical standards. Regarding the licenses, it will provide recommendation about the generation licensing procedures and the license application. It will also monitor the process of integration of local municipalities and councils in the concession areas of existing distribution companies. Distribution and Generation can be licensed under either of two existing regulatory approaches.

The first approach is the traditional "two-step" process which requires both a construction permit and separate operating license. The second approach is the new "one-step" licensing which incorporates a combined construction and operating license. Both of these processes allow a deterministic or risk-informed performance-based approach to technical requirements. PERC will create a web-based licensing portal to make the license administration process easier to use and improve the security and confidentiality of information. It will be designed with three key objectives in mind:

- Confidentiality and security
- Ease of use
- Improved data quality

Currently JDECo and NEDCo are licensed by PERC and it is expected that fees collection will start in 2014. Licensing, monitoring, and compliance strategies are based on preparing and executing the licenses system including designing and publishing the forms, also the process of giving licenses in addition to monitoring the license conditions.

f) Technical Competences

PERC reviews and monitors the application of electricity tariffs and send the recommended tariff to the Energy Authority, who is responsible for the decision of the tariff. Also PERC recommends the issuance of the licenses to the Energy Authority related to electricity generation, transmission and distribution. The regulator can solve disputes between customers and companies.

g) Consumer Protection

The consumer's affairs department at PERC is responsible for the following:

Receive and investigate complaints and disputes from all electricity stockholders.

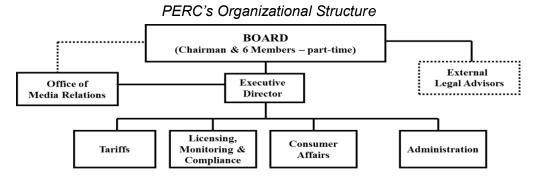


- Resolve complaints and examine possible violation of rules, procedures and regulations.
- Maintain complaints data base.
- Advertise PERC's hotline and complaints procedures that both distribution utilities and consumers have to follow up.
- Analyze complaints for each distribution company in order to understand trends and major consumer difficulties.
- New complaint boxes will be available at North and South of West Bank, in the city of Nablus and Hebron.
- Train electricity utility stuff about the techniques of upset consumers
- Consumer complaints handling.
- Conduct field visits as an essential part in the process of complaints solving.

7.15.4 Internal organization

PERC formulates its own procedures for the adoption of provisions and enjoys organizational autonomy to lay down the rules governing its internal organization, functioning and accounting procedures, even. The recruitment of professional and management staff follows the evaluation and assessment of candidates by an independent selection panel and as result of an open competition.

The Board adopts a final decision approving the procedures carried out by the selection panel and the recruitment is ultimately carried out by the Head of the human resources. Compensations are defined by law for Board Members, at similar level than government officials but lower than Industry officers. Terms and conditions of employees are specific for independent regulators, and their salaries are set according to a set pay scale for independent regulators. Similar levels to industry personnel but higher levels than civil servants.



7.15.5 Enforcement

PERC has in place key performance indicators (technical, financial and consumer related). However, PERC still lacks a strong penalties system. PERC has the authority to recommend PENER to accept or deny Licenses and to renew, withdraw or to give up Licenses from Generation & Distribution Companies submitting applications to that end.

7.15.6 Transparency and Accountability

Transparency is ensured by two major means: decisions and policies are published, and shared with stakeholders for discussion before taking the final decision. This applies on decisions related to tariff, connections fees, renewable energy, etc. PERC also issues its annual report and distributes it to a wide base of stakeholders. Also according to the law, PERC has to send the Energy Authority a quarterly report that includes details on its activities and achievements.



7.16 ERSE (Portugal)

7.16.1 Legal status

The Energy Services Regulatory Authority – ERSE – is a public corporate body with the aim of regulating the electricity, the natural gas and also electric mobility sectors, as regards management of network activities. Decree-Law no. 182/95 of July 27 launched the foundations of the Portuguese electricity sector and foresaw the establishment of a regulatory body which was given effect by Decree-Law no. 187/95 of July. Similar provisions were established for the gas sector by Decree-Law no. 14/2001 of January 27, including the allocation of regulatory powers to a competent and independent entity. Decree-Law no 97/2002 of April 12¹⁹, approved the new Statutes of Portuguese NRA– ERSE, extending its scope of regulation to the natural gas sector.

According to Law no. 67/2013 of August 28²⁰ and its Statutes, ERSE is a public corporate body with administrative and financial independence, whose regulatory powers arise from law and are implemented through secondary legislation (regulation, codes) both configured as an essential tool to carry out of its responsibilities. Within the regulatory decision-making process, the Directorate General for Energy and Geology (DGEG) is the Portuguese Public Administration²¹ entity that ensures the registration and licensing of some regulated activities. The Portuguese Government also determines the costs of general economic interest (CIEG), associated with energy policy costs, which are also a part of the grid access tariffs.

7.16.2 Independence

a) Political & Legal Independence

ERSE has administrative and financial independence, autonomy of management, organizational, functional and technical independence and possesses its own assets. It performs its duties independently, within the framework of the law, is not subject to governmental supervision or oversight but acts without prejudice to the guiding principles of the energy policy established by the Government.

Obligations	Government	Parliament
National Development Plans	Х	
Budget		
Annual Work Plan	X	
Annual Activities Report	X	

Table 9: ERE Formal Obligations for Approval

ERSE's staff is recruited through a tender procedure similar to that used for national public servants, which involves the publication of the job offer on the website of theNRA on the public employment pool.

ERSE's chairman/board members are appointed by the Government (Council of Ministers) for a term of 6 years, non-renewable. They must perform their duties on an exclusive basis, and the Board's dissolution or dismissal of any of its members can occur by resolution of the Council of

²⁰ Approves the framework for Portuguese regulatory authorities.

²¹ Whose mission is to contribute to the design, promotion and evaluation of policies on energy and geological resources in a perspective of sustainable development and security guarantee supply.



Ministers based on serious lack of individual or collective responsibility, and must be determined through an independent investigation, dully preceded by the opinion of ERSE's advisory board and the competent parliamentary committee. This procedure is applied in cases of unjustified failure to fulfill ERSE objectives; excessive deviation between the approved budget and its execution; serious material irregularities in the functioning of the Board; serious or repeated non-compliance of laws and regulations; exclusivity violation or repeated violation of confidentiality obligations.

While holding their positions in the regulatory authority, ERSE's staff, including members of the Board, cannot have any direct or indirect work relationship or any contractual relationship with the entities involved in the regulated sectors or with other entities whose activities may conflict with the NRA's duties and responsibilities. They also cannot hold any shares or interests in the entities involved in the sectors regulated by ERSE. The Board members and ERSE Heads of Division, must respect a two-year cooling-off period after the conclusion of their mandate. They may not be engaged within any regulated entity in the regulated sectors.

b) Financial Independence

ERSE has its own resources, according to the principle of self-sufficiency, which arise mainly from a share of the access rate charged to electricity and natural gas customers. Its budget is approved and implemented within the limits set by law and is subject to approval of the Government members responsible for finance and energy. The approval of the Government members mentioned is also necessary for the acquisition or disposal of property, the acceptance of inheritance or legacies and the creation of geographically dispersed offices.

c) Functional Independence

ERSE's independence means that its decisions may only be appealed in the Courts. While in the exercise of its duties as a public authority, administrative acts taken by ERSE can be appealed to Administrative Courts.

7.16.3 Competences

a) Information Access

ERSE's mission is to regulate the electricity and natural gas sectors, being an effective tool for the efficient and sustainable operation of the respective markets while ensuring the protection of consumers and the environment, transparently and impartially. According to ERSE's Statutes, all sector participants must cooperate for the proper performance of the NRA duties, including providing requested information and documents. The data collected is securely stored in an inhouse database.

b) Security & Quality Of Supply

Security issues are assigned to the Portuguese Government, through the Directorate General for Energy and Geology (DGEG), a Portuguese Public Administration entity.

c) Market Opening And Market Monitoring

Based on the EU Directives and their transposition into Portuguese law the electricity sector was liberalized in 2006 and the natural gas sector was liberalized in 2010. Aside from this possibility of being able to choose their supplier, Portuguese householders may be supplied by the last resort supplier under transitional end-user regulated tariffs until 31 December 2020.

Market supervision is one of ERSE's strategic performance priorities, namely as regards the promotion of competition in the sector and the defense of consumer interests. The provision of information and its dissemination in a transparent and non-discriminatory manner is an essential element for the affirmation of efficient and competitive markets. What ERSE seeks to do through its overall actions and, in a more focused context, through the supervision of the markets, is to ensure that such conditions are real and effective.



It is also important to show how energy prices are made up, taking into account the evolution of conditions in the wider context, namely through information on primary energy (oil, coal, etc.) prices, along with other components of the price (such as the cost of carbon dioxide emissions), so that the consumer knows the make-up of energy prices and can, therefore, make informed and conscious choices.

Both national electricity and gas markets are fully opened to competition and the Portuguese NRA must monitor the medium and long-term supply/demand balance on the national market; the expected future demand and envisaged additional capacity and quality and level of maintenance of the networks. With respect to matters relating to competition, ERSE actively cooperates with the Portuguese financial authority and the competition/anti-trust authority.

d) Tariff Setting

ERSE fixes and approves the methodologies used to establish transmission and distribution networks tariffs, the network tariffs, the methodologies for the provision of balancing and ancillary services and the access to cross-border infrastructure, and is involved in setting the grid connection fees.

The tariffs set by ERSE are cost reflective (as are the tariff methodologies). ERSE can include performance—based components in the tariff methodologies and can also penalize a non-performing service by reducing the company's rate of returns from the tariffs. In addition to the electricity and gas sectors' transmission and distribution activities, ERSE establishes tariffs for the LNG (liquefied natural gas) terminal and for underground storage of natural gas, both of which are considered regulated activities.

e) Licensing

ERSE has no competences in licensing. This tasks lies with the Directorate General for Energy and Geology (DGEG).

f) Dispute Settlement

According to its Statutes, ERSE is responsible for dispute settlement both between industry and customers, and between industry actors.

g) Unbundling

ERSE plays a role on establishing guidelines, rules and monitoring unbundling of the network operator. It must prevent cross-subsidization between different activities in a corporate group. The Portuguese NRA, according to the rules applicable, can refuse to accept costs which represent detected cross-subsidization.

h) Technical Competences

ERSE has the power to set and approve rules regarding the management and allocation of interconnection capacity, to issue secondary legislation, including market rules, grid codes and other technical rules, define metering rules and charges, require that transmission and distribution operators correct any congestion difficulties and grant exemption/s for third party access for new investments. In terms of quality of service standards and congestion management rules, ERSE has the ability to set and approve both. Regarding network development plans, ERSE issues a non-binding opinion addressed to the Government.

i) Consumer Protection

Within the scope of this public service mission, ERSE is given a range of powers by law and its Statutes. These powers include, most notably: protecting consumer rights and interests as regards prices, services and service quality; monitoring compliance with public service obligations and all other legal, regulatory and similar requirements; guaranteeing economic and financial balance of the activities of the regulated sectors exercised in the public interest companies within the framework of appropriate and efficient management; promoting competition in the energy markets between all their players.



ERSE must regularly inspect consumer complaints presented to the operators subject to its regulation and may order or recommend the necessary measures for fair compensation of consumer rights. ERSE also promotes arbitration for the settlement of disputes arising from contracts. In terms of vulnerable customers, ERSE implements the Government's measures with application to the energy sector, as do other bodies such as the Consumer Protection Agency and the Government. ERSE also plays a role in terms of providing information to vulnerable customers on their rights.

In terms of monitoring the time taken by sector participants to make connections and repairs, ERSE has the power to monitor, to intervene if it takes too long and if applicable, and to sanction sector participants.

7.16.4 Internal organization

According to its Statutes, ERSE's Board is responsible for the definition of the internal organization of the NRA. In line with this responsibility, ERSE defines its staff requirements, carries out its recruitment, approves its rules and internal regulations, including remunerative regime and career, performance evaluation, social protection and organization and discipline work, and exercises the powers of direction, management and discipline of staff. All staff members are bound by an ethics code approved by ERSE's Board.

However, some decisions, such as removal and setting of penalties and incentives for staff members, are subject to restrictions by the State Budget. New recruitments (i.e. for additional staff numbers) are subject to ministerial approval.

Salaries for Board members are established according to specific criteria set by law and those of the staff members are established according to professional experience/ background. In 2016, ERSE consists of 74 employees – of which 7 management positions, 37 regulation technicians, 15 support personnel and 15 administrative; plus 3 Board Members. ERSE's budget for 2016 was around €9.8 million, 67% of which was dedicated to salaries.

7.16.5 Enforcement

Law No. 9/2013 was published on 28 January 2013 and established the sanctions framework for the energy sector. Entering into force on 27 February of the same year, it rendered effective ERSE's power to impose penalties on sector participants. ERSE can also apply other enforcement mechanisms, such as compensation and temporary prohibition of professional activities. The regulator also publishes annual reports on quality of service by network operators. ERSE's Board comprises three members. Abstentions are not allowed. This model avoid deadlock in regulatory board decisions.

7.16.6 Transparency and Accountability

ERSE's Statutes, as well as all decisions within the framework of its regulatory powers, are must be published in the Portuguese Official Gazette (Diário da República). Other non-binding decisions and abstracts of ERSE's sanctions are available on its website (www.erse.pt).

ERSE encourages the involvement of all stakeholders in the regulation process and promotes their active participation through broadened public consultation and public hearings announced in advance. It also counts on the contributions from its statutory Advisory Board and Tariff Board, each composed by a cross-section of energy sector representatives (consumers, industry, and government). All measures taken and decisions made by ERSE are publicly justified and disclosed.

According to its Statutes, ERSE establishes and publishes annual and multi-annual activity plans and annual activity reports and accounts. ERSE is obliged to report annually on its activity both to the Parliament and the Government. The regulator publishes all relevant information on its website, in both Portuguese and in English. ERSE's communication and image office



maintains the website regularly updated, through daily news and highlights and interactions with the media.

7.17 AGEN-RS (Slovenia)

7.17.1 Legal status

The Slovenian Energy Agency (AGEN-RS) is an autonomous body set up in 1999 by an Energy Act that has been amended several times after 2004 and replaced by a new Energy Act in 2014, which further defined the competences of the regulator. It is a legal person under public law. The regulator monitors, directs and controls electricity and natural gas energy operators and carries out tasks regulating energy operators' activities in the field of heating and other energy gases. AGEN-RS is the only responsible entity to issue regulatory decisions on energy issues at national level.

On the basis of EU directives and regulations, AGEN-RS implemented the liberalization of the Slovenian energy market, including the rules allowing the development of competition between market participants. In accordance with the provisions of the EU and national legislation, the regulator is responsible for the definition of these rules as well as for monitoring their application. According to the new Energy Act22 of 2014, the regulator updated its organizational setting and enforced extended powers. The Agency issues the methodology for network tariffs and sets the network prices, whereas the governmental approval is abandoned. The same law has abandoned the licensing regime for energy activities. AGEN-RS is not responsible for the authorization of new capacity, which duty lies entirely with the Ministry. The Government and the Ministry, responsible for energy (at present the Ministry of Infrastructure) of Slovenia are the policy-makers for the energy sector.

7.17.2 Independence

a) Political and legal independence

AGEN-RS is distinct and functionally independent from other public and private entities and does not receive instructions from the Government or other entities when performing its functions.

The Energy Agency has six sectors in its organizational structure: (i) Network activities, (ii) economic regulation, (iii) renewable energy sources, (iv) market development and monitoring, (v) legal issues, and (vi) common services. The regulator is run by a Director who is tasked with managing the Agency. The Director is under the supervision of an Energy Agency Council, which gives guidelines to the Energy Agency and adopts the Agency's general acts. The Council is appointed by the Parliament and includes four members and a President. The Director is nominated by the Parliament upon the proposal of the Council. Both the Director and Council members are appointed for a six-year term following an open competition, with the possibility of reappointment.

The Energy Act provides that upon proposal of the Government, the National Assembly (i.e. the Parliament) shall dismiss the President or a member of the Council of the Agency in the following cases:

- at his/her own request;
- in the performance of his/her duty, he/she has committed a serious violation of the this

²² http://www.energetika-portal.si/fileadmin/dokumenti/zakonodaja/energetika/ez-1/ez1_energy_act_proposal.pdf



Act, an EU regulation or a general act of the Agency that governs the performance of the Council's tasks:

- it is established that, upon appointment, he/she did not fulfil all the conditions referred to in the first paragraph of the preceding Article;
- he/she has been convicted by a final judgment of a criminal offence carrying a prison sentence of six months or more;
- he/she is no longer able to perform the duties of the office for health reasons.

Such a revocation has never taken place so far.

The office of the Director of the Agency shall not be compatible with the office of President or member of the Council of the Agency. If a person who performs the duties of an office with which the office of Director is incompatible is appointed Director, he/she must amend his/her status accordingly before taking office. The Director of the Agency must not:

- be a functionary in a state authority or local community authority who performs the duties
 of the office in a non-professional capacity;
- be employed by any employer other than the Agency;
- be a member of the management or supervisory body of a performer of energy sector activities:
- hold shares or similar rights in any energy market operator
- perform work or service for, or supply goods to, a performer of energy sector activities.

No cooling-off period is foreseen after the Director, President or members of the Council of the Energy Agency finish their mandates.

There is a separate Competition Protection Office which consults with the energy regulator on issues relating to Competition. Only the Competition Protection Office, not the regulator, has the authority to assess mergers and similar activities and take measures in relation to the same. A new Slovenian Competition Act passed in April 2008 increases the Competition Protection Office's sanctioning power and broadens its competences.

Obligations	Government	National Assembly
Work programme and financial plan		Х
Annual activities report		X

Table 10: AGEN-RS Formal obligations for approval

AGEN-RS reports annually on its activities to the Government and to the National Assembly of the Republic of Slovenia. The regulator submits its annual report for the previous year to the National Assembly by 30 June of each year. The annual report of the Agency must be reviewed by a certified auditor. Both reports, on the annual activities of the agency and on the state of the energy sector in the previous year, are approved by the Parliament and sent to the Government for information.

b) Financial independence

Pursuant to the 2013 Energy Act, AGEN-RS's operations are financed by funds deriving from the gas and electricity transmission tariffs, transferred to the AGEN-RS by the TSOs. The Agency's regulatory tasks are financed by these fees, however the Agency could theoretically also collect additional funds through its operations. The regulator must not accept donations or payments deriving from other funds.

The amount of fees is determined by the Council of the Agency in annual work programme and financial plan of the regulator. Fees are determined on the basis of one unit of transmitted electricity or natural gas. Together with other expected revenues of AGEN-RS and the amount



of money that AGEN-RS saved from previous years, these resources are expected to cover the planned expenditure of the Agency related to the performance of its tasks.

The regulator's budget is approved by the National Assembly together with the Agency's programme of work. The decision on such approval shall be published in Slovenia's Official Gazette. Supervision of the lawfulness, designated use, and efficient and effective use of the regulator's resources is carried out by the Court of Audit of the Republic of Slovenia.

c) Functional independence

All decisions taken by the regulator are binding. Regulator's decisions on specific matters such as Third Party Access, network charges and supply condition can be appealed to the Ministry, which can reject the decision, but cannot amend or substitute the regulator's decision. The Agency also decides on appeals of network operator decisions regarding connection to the network once they have been through a resolution process run by the system operator. In these cases, the Agency decision in non-appealable, though an administrative dispute with the Agency can be appealed to the Administrative Court of the Republic of Slovenia.

7.17.3 Competences

a) Information access

The law provides the regulator with the right to fully access technical and financial information from energy sector participants and allow for the proper monitoring of utilities. AGEN-RS maintains an updated database to store collected data.

b) Security and quality of supply

AGEN-RS monitors the medium and long-term supply/demand balance of the Slovenian electricity and gas markets. It also oversees expected future demand for energy and the technical capacity necessary to meet that demand, the quality and level of maintenance of networks and the quality of supply.

The regulator participates in the implementation of measures to manage peak demand and address suppliers' shortfalls. AGEN-RS is not responsible for controlling tendering procedures for new infrastructure investments.

c) Market opening and market monitoring

The Slovenian electricity market has been unbundled into generation, transmission and distribution since 1990 and fully open since 1 July 2007. All consumers may choose their suppliers, although much remains under full state ownership, i.e., the Transmission System Operator (TSO) and Distribution System Operator (DSO) or majority state ownership (generation and supply). An electricity distribution system operator (DSO) is responsible for DS operation, but is not the owner of the distribution networks. The five network companies (owners) are subcontracted to carry out all the activities, including physical system operation, maintenance and investments into the networks.

Currently, there are two market forms: an organized spot exchange and a bilateral contracts market. The market operator, Borzen PLC, organized the exchange from 2002 until the end of 2008. From 2009, BSP, a regional energy exchange, is also operational.

The Slovenian market for natural gas has also been fully opened since July 2007. All consumers, including households, have the option to switch their gas supplier. All distribution system operators are below the threshold for being forced to unbundle from their supply of natural gas activities.

Similarly, the mandatory national public service of the gas transmission-system operation is carried out by one provider, the TSO, while the optional local public service of gas distribution system operation is carried out by 17 providers active in 68 local communities. The gas TSO is legally unbundled from its parent company and owns and operates pipelines within Slovenia.



The unbundling model applied is ITO. The state is the largest shareholder in the transmission company.

The retail market in electricity and gas consists of all final consumers, regardless to which voltage or pressure level and kind of network they are connected to..

The regulator pursues the objective of an effective opening of the market to all consumers and suppliers. This includes monitoring factors that have an impact on effective competition in electricity and natural gas markets, in particular the following:

- the provision of non-discriminatory access to networks, the provision of stipulated network availability and reliability and the provision of effective implementation of key processes for market operation (connection of system users, measurement, billing, supplier switches, provision of universal service, etc.);
- the level of transparency of the relevant market, including wholesale prices and prices for final consumers;
- the level and effectiveness of market opening and competition at wholesale and retail levels, including power and natural gas exchanges, disconnection rates, switching rates, maintenance costs and complaints by household consumers;
- the satisfaction and welfare of consumers from the perspective of market operation effects;
- the occurrence of restrictive contractual practices;
- the monitoring of trade in wholesale energy products in accordance with Regulation (EU)
 No 1227/2011 in order to detect and prevent trading based on inside information and
 market manipulation;
- the occurrence of other restrictive practices of market participants that prevent, restrict or distort market competition;
- the monitoring of the security of supply;
- the compiling and keeping of a comparative record of prices listed in regular price lists for household and small non-household consumers to enable a comparison of valid regular price lists of electricity and natural gas suppliers;
- the prevention of cross-subsidies between transmission, distribution and production activities.

With respect to matters relating to competition, the regulator actively cooperates with the Slovenian financial authority and competition/anti-trust authority.

d) Tariff setting

Regulated network tariffs are set ex ante following a consultation process by AGEN-RS. Network charges are set for transmission and distribution levels separately, based on the utilization and consumer categories. Network tariffs for each consumer category are uniform across the country. Network tariff categories include voltage level, connection to substations, utilization, seasonality, night/day use, household and public lighting. Regulated full service tariffs for end consumers do not currently exist.

The network tariff methodologies are incentive-based price cap, and include performance-based components. Additional quality-based incentives are used since 2011. Generators are not charged for accessing the network; consumers pay 100% of network charges. There have been no cases of refusal of access except as a result of cross border congestion. Mechanisms for the calculation of total transfer capacity are proposed by the TSO.

As for natural gas, because the market is fully unbundled, there are no end-user regulated tariffs. Third Party Access is regulated, while a price cap methodology combined with revenue



cap is used for the network tariffs. The regulator may also make use of performance-based components. The Agency licenses all activities on the gas market separately.

The regulator fixes and approves:

- the methodologies used to establish transmission and distribution networks tariffs;
- the network tariffs;
- the methodologies for the provision of balancing and ancillary services and the access to cross-border infrastructure.

The regulator is also involved in setting the grid connection fees.

In 2015, AGEN-RS adopted a new methodology for determining the regulatory framework and set the eligible costs of electricity system operators. That methodology established the conditions for determining the network charge tariffs for the current regulatory period (2016-2018).

As part of its ex-ante approval process, AGEN-RS follows a transparent and inclusive process when adopting general rules and decisions.

e) Licensing

AGEN-RS issued licenses until the year 2014 when the licensing regime was completely abandoned by the law (Energy Act).

f) Dispute settlement

The regulator is responsible for managing disputes between industry actors and between industry actors and consumers. AGEN-RS manages complaints on grid access, third party access and cross border disputes. Any interested party can issue a complaint.

g) Unbundling

Slovenia has opted for a full ownership unbundling in electricity TSO and the independent transmission operator (ITO) model for the gas TSO. The regulator plays a role on establishing guidelines, rules and monitoring the unbundling of the network operators. In addition, the gas TSO is in the process of the full ownership unbundling as well.

Technical competences

The regulator has the power to set rules regarding the management and allocation of interconnection capacity according to the EU regulations, Network Codes and Guidelines; issue secondary legislation, including market rules (under EU regulations, Network Codes and Guidelines), grid codes and other technical rules; approve operational and planning standards including schemes for the calculation of total transfer capacity; grant exemptions for third party access for new investment projects.

AGEN-RS has the ability to set and approve both quality of service standards and congestion management rules (under EU regulations, Network Codes and Guidelines) and it can intervene in case of violations and it also maintains an audited account of any revenues collected pursuant to congestion management mechanisms.

h) Consumer protection

The main tasks of the regulator on consumer issues include:

- promoting a competitive, secure and environmentally sustainable internal market in electricity and natural gas, and effective opening of the market to all consumers and suppliers;
- eliminating restrictions on trade in electricity and natural gas;
- encouraging, in the most cost-effective way, the development of secure, reliable and efficient nondiscriminatory systems that are consumer-oriented;



- ensuring that electricity and gas consumers benefit from the efficient functioning of their national market:
- helping to achieve high standards of public service for natural gas and electricity consumers,
- ensuring the necessary procedures for consumer switching.

AGEN-RS provides consumers with updated information on their rights, tools to monitor their energy consumption and prices, and an Alternative Dispute Resolution tool. The regulator do not have powers concerning vulnerable consumers, who are managed by a national Consumer protection organization.

The regulator has the power to monitor the time taken by sector participants to establish new connections and make repairs and it can sanction them if they do not respect the time prescribed by regulations.

7.17.4 Internal organization

The Slovenian regulator can autonomously set and organize its structure and job classification. Specifically, AGEN-RS can determine the number of employees and the financial resources it needs to perform its tasks. The regulators' employees are subject to the general legislative act governing employment relationships. Employees' salaries are determined according to the regulations governing the salary system in the public sector, while the regulator can autonomously determine any funds for special projects requiring an increased workload. Any additional fund should be included in the Agency's financial plan for the relevant year.

The regulator's staff has increased from 46 members in 2013 to 60 members by the end of 2017. The Director and staff of the Agency are paid as civil servants; Council members are paid only with attendance fees when they participate at the Council meetings. In 2013, the regulator's budget corresponded to 2.4 million euros, 60% of which were devoted to employees' salaries and 4% to IT technology. In 2017, the budget was at the level of 3,3 million euros. The regulator found these resources are insufficient to properly perform its activities.

7.17.5 Enforcement

AGEN-RS has the power to sanction sector participants by reducing rate of return in response to violations to energy regulators, and impose additional penalties to regulated entities. The law does not foresee other forms of enforcement and AGEN-RS does not publish comparative reports on the performance of network regulators. The Energy Agency Council takes decisions by simple majority, with each member expressing one vote.

7.17.6 Transparency and accountability

AGEN-RS keeps regular contacts with all market stakeholders. It provides them with information on the evolution of the market regulation, including updates on tariffs and data on market monitoring. Before taking final decisions, the Agency implements a consultation process on draft resolutions. The regulator consults stakeholders through public hearings, written consultations and workshops, and focus groups.

The regulator has a reporting obligation towards the Slovenian Parliament. The Board disseminates its decisions through a dedicated communication strategy. AGEN-RS issues a comprehensive annual report, all the while implementing measures to protect sensitive data. It also publishes its decisions and reports on the regulator's website.

7.18 CNMC (Spain)

The National Commission on Markets and Competition (CNMC in Spanish) is the national



authority that promotes and defends proper functioning of all markets, in the interest of consumers and businesses. It is a public entity with its own autonomous legal status. It is independent from Spain's central government but is subject to parliamentary and judicial control. It began its operations on 7 October 2013.

The National Energy Commission (CNE) was created in 1998. The Spanish Authority for Markets and Competition (*Comisión Nacional de los Mercados y la Competencia*, CNMC) was created in 2013, with responsibilities in competition law enforcement and 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 led by Mr. Marin-Quemada as President; it merges functions, resources and human capital of five pre-existing authorities in these fields, among them the former energy regulator CNE, founded in 1998. 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.

7.18.1 Independence

a) Political & Legal Independence

CNMC is a public body with its own legal personality and full public and private capacity. As a consequence, CNMC has an organic and functional autonomy and full independence from the Government, public administration and market players.

The Board is the governing body that takes decisions including regulation, sanctions, advisory functions, advocacy, arbitration and conflict resolution. The Board is made up of 10 members appointed by the government, after nomination by the Minister of the Economy, Industry and Competitiveness. The Parliament may veto the appointment by absolute majority vote within one month. Commissioners are appointed among highly qualified professionals in the Commission's area of action, and they must be approved by the corresponding Committee from Spain's Congress of Deputies. These members have a 6-year, non-renewable mandate and they shall comply with an incompatibility regime during the term and two years after in order to prevent conflicts of interest.

The Board can act either in plenary sessions or in two chambers: the Competition Chamber (composed by the President plus 4 Commissioners) which deals with the competition law enforcement and competition advocacy, and the Regulatory Monitoring Chamber (composed by the Vice-president plus 4 Commissioners) in charge of regulation, monitoring and conflict resolution in electronic communications, audiovisual electricity and natural gas, postal sector, airport tariffs and railways. On the other hand, the Plenary is made up of all members of the Board and is chaired by the President.

b) Financial Independence

The drafting and approval of the budget is established by law. CNMC's budget forms part of the State Budget. Each year, the Commission shall present a draft limitative budget to the Ministry of Finance to be approved by the Parliament. Some of the sector-specific activities of CNMC are covered by taxes fees and charges from regulated entities.

Moreover, CNMC is subject to inspection by the Government Comptroller's Office (IGAE), the body that performs the internal control of the state's public-sector economic and financial management. Permanent financial control is performed by a Delegated Auditor settled in the Commission.

c) Functional Independence

The decisions of CNMC can only be appealed to the Courts.



7.18.2 Competences

a) Information Access

CNMC's mission is to regulate electricity, natural gas downstream oil markets, telecommunications, audiovisual, transport and postal sector, etc. and to ensure an efficient functioning of the respective markets. In this regard, CNMC has full access to the financial and technical information of sector participants. According to the law, all sector participants are obliged to cooperate with CNMC for the proper performance of the NRA duties, including the provision of the requested information and documents.

b) Security & Quality Of Supply

CNMC monitors medium and long-term supply/demand balance in the national energy market, expected future demand and envisaged additional capacity, quality and level of maintenance of the networks and quality of supply. CNMC participates in the implementation of measures to cover peak demand and to address any shortfalls of one or more suppliers.

CNMC, moreover, plays a role in prohibiting abusive practices affecting wholesale energy markets and in detecting and investigating market manipulation practices. Related to investment planning and cost recovery, CNMC provides opinion to the Government on development plans.

c) Market Opening and Market Monitoring

Market opening is an important feature of the energy markets which increases competition and correspondingly the service quality and customer satisfaction. National timetables for the full opening of the electricity and gas markets are already completed.

The provision of information and its dissemination in a transparent and non-discriminatory manner is an essential element for the affirmation of efficient and competitive markets. In this context, CNMC has responsibility for collecting information on market dominance as well as on predatory and anti-competitive behavior. Regarding matters related to competition, CNMC actively cooperates with EU Competition/Anti-trust Authority.

d) Tariff Setting

Regarding tariffs, CNMC is not competent in fixing tariffs or methodology; it is the Ministry of Energy, Tourism and the Digital Agenda which makes regulatory decisions with a previous non-binding report of CNMC.

e) Licensing

CNMC is not competent in licensing. Regarding licensing for traders, licenses have been substituted by a statement of compliance with the legal requirements to develop trading activities that is submitted to the Ministry of Ministry of Energy, Tourism and the Digital Agenda.

f) Dispute Settlement

CNMC is responsible for dispute settlement among energy utilities; however it is not responsible for consumers' disputes. CNMC settles the disputes regarding the grid access, third party access and cross-border issues.

g) Unbundling

CNMC has a role with respect to utility unbundling. In this context, CNMC has the duty to draw up guidelines for compliance review and for reporting obligations regarding the unbundling process. CNMC has a power to mandate changes in accounting practices where the CNMC determines that the sector participants are not sufficiently unbundled.

h) Technical Competences

CNMC has the power to set and approve rules regarding the management and allocation of interconnection capacity, to issue secondary legislation, including market rules, grid codes and other technical rules, require that transmission and distribution operators correct any congestion



difficulties. In terms of quality of service standards and congestion management rules, CNMC has the ability to set and approve both of them.

i) Consumer Protection

Reliable, solid, well-functioning energy markets can only be achieved through consumer perception and satisfaction. Regarding the protection of consumer rights, CNMC has some responsibilities as follows:

- Ensure compliance with the regulation and procedures established related to switching supplier,
- Ensure access for customers to their consumption data,
- Identify agents whose actions deficiencies in the supply to customers are attributable,
- Proposing relevant measures that should be adopted.
- Ensure tools for consumers to check or monitor energy prices.

CNMC has the power to monitor the time taken by sector participants to make connections and repairs;. The regulator does not have the power to address the needs of vulnerable consumers since the Ministry of Energy, Tourism and the Digital Agenda is responsible for energy poverty issues.

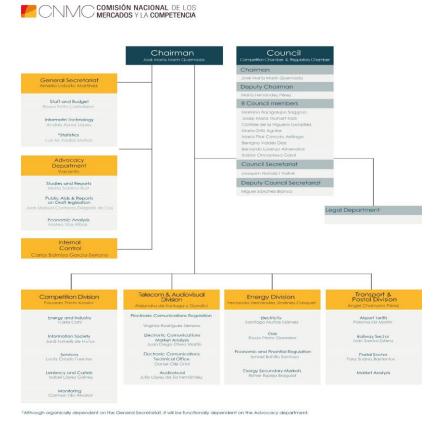
7.18.3 Internal organization

CNMC structure is defined in its Organic Statute that is approved by the Government. The Board has the capacity of approving the Internal Regulation to define the working procedures and to ensure appropriate coordination among different units. CNMC's staff requirements and recruitment process design are subject to approval by an external public body, although recruitment decisions and internal staff allocation are adopted by CNMC. CNMC staff is composed by two types of public employees, civil servants and employees under labor contract. These two groups are subject to different sets of working regulation.

Salaries for Board members are determined by the Ministry of Finance and Public Administration. Salaries of civil servants are set according to same pay scale as in other public administrations. Salaries of employees which are not civil servants are subject to collective bargaining. In 2016, CNMC staff amounted around 500 employees and it had a budget of 59,708,890 Euros, from which 52% of budget is devoted to salaries. There is a code of ethics and confidentiality binding for the staff.

Organization Chart of CNMC





7.18.4 Enforcement

CNMC has the power to sanction sector participants in case of law infringement. However CNMC can apply other enforcement mechanisms such as compensation and temporary prohibition of professional activities and network access, license revocation.

7.18.5 Transparency and Accountability

Since the creation of CNMC, transparency has been one of its guiding principles. Numerous actions (statutory and voluntary) have been implemented to ensure that it is an open and transparent institution.

According to Article 37 of the Act 3/2013 (Law of creation of CNMC), this Authority has a statutory duty to promote transparency of its activities and decisions. As a consequence, all provisions, decisions, agreements, reports, together with the Annual Report on activities and the Action Plan must be published electronically in its website.

Accountable to the Parliament, CNMC is under a specific duty to present its annual report before the Parliament. Every three years CNMC shall also present an impact assessment of its action plans and the results obtained. The President must appear at least annually before the Members of the Parliament to detail the basic courses of action and the plans and priorities of the institution for the future.

7.19 MEMRE (Tunisia)

7.19.1 Legal status

There is no independent energy regulator in Tunisia. The oversight of the energy sector is carried out by the Ministry of Energy, Mines and Renewable Energies (formerly Ministry of Industry, Energy and Mines). The Ministry supervises STEG, the vertically integrated Tunisian



Company for Electricity and Gas, in the production, transport and distribution of electricity and gas. Three more bodies undertake tasks commonly carried out by an energy regulator.

- The National Agency for Energy Management (ANME) was created in 1985 as a public institution of a non-administrative nature and placed under the supervision of the Ministry of Industry. The ANME was re-established by No. 2004-72 in 2004²³. Its activities include the design and implementation of the so called national energy conservation programs. In more detail, ANME is entrusted with the preparation and implementation of the legal and regulatory framework related to energy conservation and energy efficiency actions. It also manages the National Energy Conservation Fund (FNME) now replaced by the Energy Transition Fund which is focused on the support of RES. ANME plays also an important role in discussions about improved Feed-in-tariffs for Renewable Energy projects and is involved in capacity building and awareness-raising activities related to renewable energy sources and energy efficiency and in encouraging investment in the energy sector through granting tax and financial incentives.
- The Commission Supérieure de la Production Indépendante d'électricité (CSPIE-High Commission for Independent Power Production) was established in 1996. It is responsible for laying down the conditions and procedure for granting electricity concessions to Independent Power Producers (IPPs). According to the law, the Commission decides on the modus and conditions for the selection of an IPP investor, the benefits to be granted to the concessionaire and on any other matter relating to independent power production²⁴. The CSPIE is an Inter-ministerial body and is essentially in charge of choosing the concessionaire. The CSPIE and the CIPIE described below are both indirectly involved in regulation of the energy sector, due to their involvement in license-granting for IPP projects, as well as the formulation of financial incentives for the establishment of such projects.
- The Commission Interdépartementale de la Production Indépendante d'électricité (CIPIE -Interdépartementalel Commission for Independent Power Production) was also set up in 1996. Its role is complementary to the CSPIE. The CIPIE is in charge of suggesting the terms and conditions to be granted to the concessionaire. It reviews offers and submits findings and recommendations to the CSPIE. The CIPIE is also responsible for monitoring the negotiations with the selected independent producer to achieve of final agreement. This agreement should specify the characteristics of the concession including duration, benefits, if any, granted to the concessionaire. Participants to the CIPIE are the members of the CSPIE and the incumbent STAG.

²³ Source: http://www.reegle.info/policy-and-regulatory-overviews/TN

²⁴ Source GSE (2013) TUNISIA, Energy Country Report



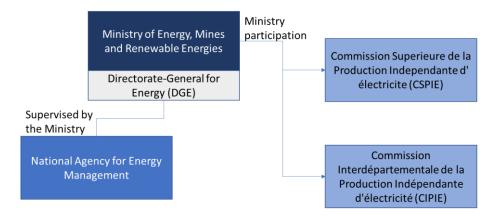


Figure 23 Bodies involved in tasks typically undertaken by an energy regulator in Tunisia

7.19.2 Independence

a) Political & Legal Independence

All bodies described above are either part of the Ministry (Directorate General for Energy), supervised by the Ministry (ANME) or operate with the participation of the Ministry and other Ministries (CSPIE, CIPIE).

b) Financial Independence

All bodies are funded through the state budget.

c) Functional Independence

There is no functional independence.

7.19.3 Competences

a) Information Access

The National Energy Observatory (ONE) which operates within the Directorate General (DG) for Energy in the Ministry is responsible for the collection of energy related information. Thus the ONE, and overall the Energy DG must collect some technical information related to energy production, and potentially also transmission and distribution. It is not clear if the Ministry has access to financial information from STEG or other sector participants.

Security & Quality of Supply

Tunisia's power sector is well developed, and nearly the entire population enjoys access to the national electricity grid. However, because of delays in power plant construction, the power sector does not possess generation capacity in reserve and is susceptible to blackouts. The incumbent STEG is hard pressed to meet peak summer electricity demand, let alone keep up with Tunisia's annual 5% growth in power consumption.

The direct competences of the Ministry in the context of security and quality of supply are unclear. As the Ministry is generally responsible for the development of projects in the energy sector and for the promotion of the use of new energy sources, energy savings and renewable energies, it may be inferred that it has responsibilities for long term energy planning, thereby for ensuring long term security of supply. The Ministry's competences on the quality of electricity supply are also unclear. Once more it may be inferred that these responsibilities are entrusted directly upon STEG without involvement of the Ministry.

b) Market Opening and Market Monitoring

The power sector is controlled by the incumbent STEG. A 2015 energy law encourages independent power projects (IPPs) in renewable energy technologies. The law's implementing



decrees and a standard Power Purchase Agreement (PPA) were published early 2017. Independent Power Producers (IPPs) sell at least 70% of energy produced directly to industrial end-users through bilateral contracts. Up to 30% of excess power generated from the IPPs may be sold back to STEG at a fixed price. Direct electricity sales by IPPs to STEG (in excess to the 30% level) are permitted only on a case-by-case basis²⁵.

Tariff Setting

The relevant department of the Ministry (DGE- General Directorate for Energy) sets up bundled electricity tariffs for all categories of consumers following STEG's proposal.

c) Licensing

Concessions are granted by the CSPIE. Installed capacity of IPPs (gas fired plants) is approximately 24% of the total capacity installed 26

d) Dispute Settlement

Tunisia is a member of the International Center for the Settlement of Investment Disputes and is signatory to the 1958 New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards.

The country has several domestic dispute resolution venues. The best known is the Tunis Center for Conciliation and Arbitration. When an arbitral tribunal does not adhere to the rules governing the process, either party can apply to the national court for relief. Unless the parties have agreed otherwise, an arbitral tribunal may, on the request of one of the parties, order any interim measure that it deems appropriate²⁷.

Although arbitration and dispute resolution venues are in place, the existence of specific mechanisms for arbitration between STEG and possible private developers in case of conflict, especially with respect to interpretation and implementation of regulations are *unclear*.

e) Unbundling

The incumbent STAG remains a bundled enterprise.

f) Technical Competences

There is no single law that lays out the functions of different bodies within the Government of Tunisia or that describes the market framework. Instead, many different decrees and laws have been issued over the past two decades that have shaped the current structure of Tunisia's electricity sector. The Ministry has competences over five sectors: industry, technology, energy and mines. The Directorate General for Energy of the Ministry deals with all parts of the energy chain from exploration and production of oil and gas to power generation, transmission and distribution.

The Ministry's responsibilities in the energy sector are outlined in its website as: "to promote research and the rational exploitation of the country's energy resources, to ensure the country's energy security of supply, to draw up legal texts on energy, to ensure the application of regulations and conventional frameworks relating to the research and exploitation of hydrocarbons and other sources of energy, to negotiate with companies and to file the allocation of research permits and hydrocarbon concession agreements to the government".

The Ministry approves the bundled electricity tariffs to consumers, as proposed by STEG, and is involved in the selection of concessionaires through its participation in the CSPIE, CIPIE. ANME

²⁵ Source: https://www.export.gov/article?id=Tunisia-Electrical-Power-Systems-and-Renewable-Energy

²⁶ Source: Observatoire National de l' Energie, Conjoncture énergétique à fin Avril 2015

²⁷ Source: https://www.export.gov/article?id=Tunisia-Dispute-Settlement



has authority in the areas of Energy Efficiency and Renewable Energy. It plays also a role in the current discussion about improved feed-in-tariffs for RES projects. As already outlined above, the CSPIE and the CIPIE are both indirectly involved in the regulation of the energy sector, due to their involvement in license-granting for IPP projects, as well as in the formulation of financial incentives for the establishment of such projects.

g) Consumer Protection

Tunisia has a long tradition of generous energy and food subsidies. Subsidies deliberately became the backbone of the new social protection strategies of the 1970s. The IMF acknowledges that substantial efforts are being made towards the reform of energy subsidies to achieve a balance between cost reflectivity requirements and protection of those in need.

There is no explicit definition of a vulnerable customer yet. In 2014, the government introduced a lifeline electricity tariff for households consuming less than 100 kWh per month²⁸.

In its June 2016 review²⁹, the IMF states that further rationalization of electricity subsidies is welcomed, together with the introduction of a special lifeline tariff, for the poor. The introduction of a new social identification number and a new database on vulnerable households is considered as an important item towards the creation of a better-targeted social safety net.

7.19.4 Internal organization

The organization of the Ministry includes

- a cabinet of 9 Bureaus supporting the Minister in the decision-making process,
- 4 Directorate Generals (DGs) for the so called common services (Administrative and Financial Affairs, Organization, Methods and Informatics, Directorate of Legal Affairs and Litigation, Directorate of Document Management and Documentation) and

9 sectoral DGs.

The Energy DG is one of the 9 sectoral ones. It comprises four services, 2 allocated to the upstream sector (the Directorate of Hydrocarbon Prospecting and Production and the Hydrocarbon Refining, Transportation and Distribution Directorate), one directorate focusing on power production, transmission and distribution and also natural gas and energy efficiency (Directorate of Electricity, Gas and Energy Efficiency. The fourth directorate under the energy DG is the National Energy Observatory (ONE) entrusted with the task of reporting.

The National Agency for Energy Management is organized in administrative, horizontal and vertical units. The first two support the decision-making process and perform general functions related to legal affairs and procedures, financial issues, monitoring of programs etc. There are 5 vertical units focusing on industrial energy efficiency and in the overall rational use of energy as well as renewable energy. Available on-line information in English and French is limited so that the specific activities of each unit cannot be further specified. There seems to be no publicly available information on the organization of CSPIE and CIPIE.

7.19.5 Enforcement

In its 2013 assessment on the commercial lows of Tunisia, the EBRD reports that the enforcement powers of the Ministry are limited. No further information was found to support or

²⁸ Source: World Bank (2013) Cuesta, J., El-Lahga. A., Lara Ibarra, G. The Socioeconomic Impacts of Energy Reform in Tunisia, A Simulation Approach

²⁹ Source: IMF Country Report No. 16/138



contradict this statement.

7.19.6 Transparency and Accountability

The National Energy Observatory (ONE) publishes information related to upstream production and electricity generation. Last report available online was published in 2015.

There does not seem to be a streamlined process for consultations neither through the Ministry's site not through the National Agency for Energy Management.

STEG maintains a website dedicated to residential consumers that offers information about their electricity bills, methods of payment and allows for the submission of complaints. The Natural Resource Governance Institute, the Columbia Center on Sustainable Investment and the World Bank, in partnership with Tunisia's Ministry of Energy are implementing a Resource Contracts site for the publication of newly released hydrocarbon investment contracts and associated documents³⁰. It is acknowledged that further transparency particularly in relation to the calculation of tariffs and subsidies is required.

7.20 EMRA (Turkey)

7.20.1 Legal Status

Energy Market Regulatory Authority (EMRA) is an administratively and financially autonomous Authority established under the Law No. 4628 of 2001. EMRA is the sole regulator of electricity, gas and downstream oil (fuel and lubricants) markets in Turkey. EMRA's regulatory powers arise from law and are implemented through secondary legislation (regulation, codes, by-law, board decisions, etc.).

EMRA fulfills its duties and uses powers assigned it by Natural Gas Market Law No. 4646 (2001), Petroleum Market Law No. 5015 (2003), LPG Market Law No. 5307 (2005), and Electricity Market Law No.6446 (2013). The aim of these laws is to develop a transparent, reliable, competitive, sustainable, environment friendly energy markets, and to ensure an independent regulation and supervision.

7.20.2 Independence

a) Political & Legal Independence

The primary law provides a set of measures ensuring independent decision making of EMRA. EMRA Board is comprised of seven (7) members, including the President and the (1) Second President, appointed by the Council of Ministers among the qualified and experienced professionals (at least 10 year experience) in the sector for a 6-year term which may be renewed. 6-year term is longer than the parliamentary term which is now 4 years. Board members cannot be dismissed before the expiration of their terms unless they violate certain laws or have extreme health problems.

To ensure EMRA's independence and autonomy, Board Members cannot take any duties in public or private institutions unless they are based on a special law during their membership. Moreover, for two years after the end of their terms of office, Board members shall not be entitled to be employed by legal personalities subject to private law provisions and operating in electricity, natural gas, petroleum or LPG markets or by the affiliates thereof, or to be shareholders of those businesses.

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³⁰ http://tunisia.resourcecontracts.org/



While holding their positions in the regulatory authority, EMRA's staff including members of the Board cannot have any direct or indirect work relationship or any contractual relationship with the entities involved in the regulated sectors or with other entities whose activities may conflict with the EMRA's duties and responsibilities. They also cannot hold any shares or interests in the entities involved in the sectors regulated by EMRA. This rule also applies for their close relatives.

b) Financial Independence

EMRA has its own resources independent from central government budget. EMRA's revenues are enlisted in the primary law, i.e. license & certificate fees, market participation fees, fines (certain percentage of), transmission surcharges and publication revenues.

The budget process is established by law and approved by the parliament. EMRA is subject to the general expenditure rules. Unspent budget is transferred to the Ministry of Finance. Books and accounts are deemed public property and audited by the Turkish Court of Accounts.

c) Functional Independence

The decision of EMRA can be appealed to the administrative courts and while appealing, the contested decision remains in effect until a motion for stay of execution is adopted or decision is reversed by the Court.

7.20.3 Competences

a) Information Access

EMRA's mission is to regulate electricity, natural gas and downstream oil markets and to ensure the efficient and sustainable operation of the respective markets by guaranteeing consumer rights and respecting environment. In this regard, EMRA has full access without any limitation to the financial and technical information of its licensees. The data are collected and securely stored in an in-house database that is under scrutiny and operated by EMRA.

According to primary and secondary legislation, all sector participants are obliged to cooperate with EMRA for the proper performance of theNRAduties, including the provision of the requested information and documents. So far EMRA has not encountered any problem concerning information access.

b) Security & Quality Of Supply

Security of Supply is mission of the Ministry of Energy and Natural Resources. EMRA assists the Ministry in fulfilling its mission. To this end, EMRA monitors medium and long-term supply/demand balance in the national market, expected future demand and envisaged additional capacity, quality and level of maintenance of the networks and quality of supply. The result of the monitoring is reported to the Ministry. EMRA participates in the implementation of measures to cover peak demand and to address any shortfalls of one or more suppliers.

EMRA, moreover, decides on the required investment amount taking into account the reports and forecasts such as production capacity projection and investment plans prepared by Transmission and Distribution System Operators in order to strengthen the standards and level of maintenance and reliability of transmission and distribution systems. EMRA establishes general guidelines on tendering process regarding distribution grid investments.

c) Market Opening and Market Monitoring

Market opening is an important feature of the energy markets which increases competition and correspondingly the service quality and customer satisfaction. A precise time for a fully open electricity and natural gas market was not determined. However, natural gas market is fully open except for the household consumers since 2012. On the other hand, based on Board Decision, the eligible consumer limit in electricity market was decreased to 2,400 kWh/year in the beginning of 2017. This threshold represents a 90% theoretical market opening degree.



EMRA assists eligible consumers while choosing their supplier. In this sense, a section that contains information to guide eligible consumers is on air on EMRA's website.

The provision of information and its dissemination in a transparent and non-discriminatory manner is an essential element for the affirmation of efficient and competitive markets. In this context, EMRA monitors the wholesale and retail markets and ensures that market participants make timely notifications of their market activities. Thus, EMRA publishes market reports monthly and annually to the public.

Regarding matters related to competition, EMRA actively cooperates with Competition Authority. In this regard, a cooperation protocol was signed on 28.01.2015 with the Competition Authority.

d) Tariff Setting

Provision of reliable, adequate, high quality, sustainable and low cost natural gas and electricity to the consumers, provision of financial sustainability, reasonable profitability to enable investment, support for development of competition, nondiscrimination between equal parties and transparency principles are taken as a basis in preparation of the tariffs.

In this regard, EMRA sets out the rules, methodologies used to establish transmission and distribution networks tariffs and correspondingly takes tariff proposals from licensees. Tariffs to be prepared by the relevant legal entities and the information and documents shall be prepared and submitted to the Authority. Considering the financial data and tariff proposal of the relevant legal entities, and related market data, The Authority determines the tariffs and submits them to the Board for approval. Approved tariffs are applied by the relevant legal entities throughout the tariff implementation period..

Tariff applications which are not done in accordance with the relevant procedure shall not be processed until the inconformity is remedied. In such a case, the applicant shall be notified in written and given time to remedy the inconformity. If deemed appropriate, the tariff proposals shall be approved by the Board. If the legal entity does not file its application and/or does not remedy the inconformity in time, relevant tariffs may be determined by the Board. The tariffs which are approved or determined by the Board shall be publicized by the relevant legal entity. The tariffs set by EMRA are cost reflective. EMRA provides a detailed evaluation of the data and methodologies used for taking its decisions as part of its ex-ante approval process.

e) Licensing

EMRA is competent for the granting, amendment or revoke of licenses for market activities, including competitive ones. The licensing requirements are set by the legislation prepared and issued by EMRA. EMRA conducts non-discriminatory treatment while accepting and assessing license applications as per the provisions of the respective by-laws.

f) Dispute Settlement

EMRA is responsible for dispute settlement among the legal entities and between legal entities and consumers.

g) Unbundling

EMRA plays a role in the establishment of the guidelines and rules on and monitoring of unbundling of the market activities and players. Legal entities subject to tariffs are not allowed to make cross-subsidization between different activities in a corporate group and different market activities and they must keep separate accounts for each activity.

h) Technical Competences

EMRA has the power to set and approve rules regarding the management and allocation of interconnection capacity, to issue secondary legislation, including market rules, grid codes and other technical rules, to define metering rules and charges, to approve operational and planning standards including schemes for the calculation of total transfer capacity and to require that



transmission and distribution operators correct any congestion difficulties and grant exemption/s for third party access for new investments. However, "exemption" is not defined in the Natural Gas Market Law and in the related legislation.

In terms of quality of service standards and congestion management rules, EMRA has the ability to set and approve both of them. Moreover, EMRA has the power to enforce sanctions in case of violation.

i) Consumer Protection

EMRA believes that reliable, solid, well-functioning energy markets can only be achieved through consumer perception and satisfaction. Regarding the protection of consumer rights, consumer complaints and applications are examined by EMRA. On the other hand, the standards, procedures and principles to be applied by the legal entities operating in the market for the services they offer to the consumers are determined by EMRA.

EMRA informs the public about energy market regulations and applications and tries to create consumer awareness. In this regard, EMRA has designed sections on its website where consumers can easily submit complaints about their problems, check their electricity bills and reach information about their rights and obligations. The regulator regularly assesses consumer complaints presented to the operators subject to its regulation and may order or recommend necessary measures for fair compensation of consumer rights.

EMRA doesn't have the power to address the needs of vulnerable consumers since vulnerability issues are addressed via social policy. In terms of monitoring the time given to the sector participants to make connections and repairs, EMRA has the power to monitor, to intervene if it exceeds the given time and if applicable, and to sanction sector participants.

7.20.4 Internal organization

According to its Statutes, EMRA's Board is responsible for the definition of the internal organization. Additionally, EMRA defines its staff requirements, carries out its recruitment process, approves its rules and internal regulations, including salary regime and career, performance evaluation, social protection and organization and exercises the powers of direction, management of staff. All staff is bound by an ethics code approved by the EMRA's Board.

Salaries for Board members and staffs are established according to the criteria similar to that of public officials set by law. According to Law, 750 cadres are assigned to EMRA. In 2016, EMRA consists of 482 employees assigned as below:

- 77 in Electricity Market;
- 29 in Natural Gas Market;
- 57 in Petroleum Market;
- 26 in LPG Market:
- The rest in other departments.

EMRA's budget for 2016 was around €60 million, %20 of which was dedicated to salaries.

7.20.5 Enforcement

According to EMRA's Statutes, EMRA is authorized to sanction sector participants in case of violations. EMRA can apply enforcement mechanisms such as compensation and temporary prohibition of professional activities and network access, license revocation, administrative fines. EMRA can also annul the executive board and appoint new members in extreme situations.



EMRA's Board is comprised of seven members. When the number of votes proves to be equal in the Board meeting, the vote of the President of the Board is counted twice in order to avoid deadlock in regulatory board decisions.

7.20.6 Transparency and Accountability

EMRA's Statutes and all decisions within the framework of its regulatory powers are published in the Turkish Official Gazette (Resmi Gazete). Other non-binding decisions and announcements are available on its website. According to its Statutes, EMRA publishes monthly and annual sector reports, and annually its own activity report. EMRA is obliged to report periodically on its activity to the Ministry.

EMRA publishes all relevant information on its website only in Turkish. The English version of website and legal documents are under construction and will be available soon. EMRA's communication office maintains the website regularly updated with daily news and highlights and interactions with media.



8 Conclusions

The Mediterranean energy markets are progressively and rapidly changing, under the pressure of many driving forces. The most important one is probably climate change mitigation, which is pushing towards more sustainable energy productions in terms of lowering the emissions in the atmosphere.

With particular regard to the Mediterranean basin, renewable energy sources and energy efficiency measures are key to address economic and social developments, supporting job creation and providing easier and safer access to energy, while taking advantage of the potentiality of the natural resources of area, such as wind and solar irradiation.

But there are significant fossil resources such as oil and natural gas, both in the Northern Africa than in the Middle East off-shore, that are crucial for the local economies as well as for the security of supply of neighbor countries.

To fully benefit from these resources, electric interconnections and pipelines are needed to connect supply to demand and to foster energy trade.

Being energy infrastructures capital intensive, long term and clear set of rules is required to lower the risk and capital remuneration.

As reported in this document, most of the Mediterranean Countries have recognized the value of a stable, transparent and robust energy regulatory framework, establishing independent regulators provided with adequate powers and resources, while engaging stakeholders to create evidence-based regulations with public consultations and hearings.

The processes that have led to these institutional changes has sometimes been long and not easy. Some failures have been registered and in some countries regulation is not fully empowered to protect consumers, to foster and promoting investments and market developments. For instance, while setting tariffs and monitoring compliance to energy regulations, not all NREs have sufficient powers to impose sanctions and penalties. Moreover the level of independency from Governments and Parliaments is not sufficient to protect energy regulators from undue influences that may modify regulation, for instance according to policies that may derive from electoral cycles.

As a result of their experiences, associated in MEDREG, NRAs have jointly elaborated and detailed a set of principles or requirements for a good regulation to fulfill their missions with a long term view. Moreover they have also understood that it is central to let the public opinion and the national institutions appreciate the importance of an effective and efficient regulation, acting in crucial sectors for the modern economies.

To increase also their capabilities, NRAs have decided to exchange their experience and to share lessons learnt, to jointly cope with the challenges they are called to face.

An intense and ambitious capacity building program has been defined to support and strengthen energy regulators, taking advantage of the skills and experiences available in MEDREG.

Our expectations are to contribute to the social and economic development of the nations around a sea which has always been a meeting place of cultures and people by favoring an harmonized regulatory framework as the basis for a future energy community of the Mediterranean.



Annex 1 – List of abbreviations

NRA	National Regulatory Authority
UfM	Union for the Mediterranean
REM	Regional Electricity Market
LNG	Liquefied Natural Gas
ISO	Independent System Operators
ITO	Independent Transmission Operator
TSO	Transmission System Operator
DSO	Distribution System Operator
IT	Information Technology
HR	Human Resources
TPA	Third Party Access
REMIT	Regulation on Energy Market Integrity and Transparency



About MEDREG

MEDREG is the Association of Mediterranean Energy Regulators, bringing together 25 regulators from 21 countries, spanning the European Union, the Balkans, North Africa and middle east.

MEDREG benefits from the European Union's financial support.

Mediterranean regulators work together to promote greater harmonization of the regional energy markets and legislations, seeking progressive market integration in the Euro-Mediterranean basin. Through constant cooperation and information exchange among members, MEDREG aims at fostering consumers rights, energy efficiency, infrastructure investment and development, based on secure, safe, cost-effective and environmentally sustainable energy systems. MEDREG acts as a platform providing information exchange and assistance to its members as well as capacity development activities through webinars, training sessions and workshops. The MEDREG Secretariat is located in Milan, Italy.

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For more information, visit www.medreg-regulators.org



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