



MEDREG

MEDITERRANEAN ENERGY REGULATORY OUTLOOK 2020

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Institutional
Working group
(INS WG)

ABSTRACT

This document presents an update on the status of energy regulation in the Mediterranean Basin in 2020 and aims to provide a complete overview of how the national energy sectors are ruled, ranging from independent entities to governmental bodies. Each regulator is analysed according to several dimensions, such as legal status, independence, competences, internal organisation, enforcement, transparency and accountability. These features are directly linked to the Good Regulatory Principles defined by MEDREG to support and guide the development and reinforcement of national regulations and to create a harmonised environment for fostering investments, competitiveness and consumer protection.

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DISCLAIMER

This publication was produced with financial support from the European Union. The contents are the sole responsibility of MEDREG and do not necessarily reflect the views of the European Union

ABOUT MEDREG

MEDREG stands for the Association of Mediterranean Energy Regulators which gathers 27 energy regulators from 22 countries, spanning the European Union (EU), the Balkans and the MENA region.

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 to foster consumers' rights, energy efficiency and infrastructure investment and development based on secure, safe, cost-effective and environmentally sustainable energy systems. MEDREG serves as a platform allowing information exchange and providing assistance to its members as well as offering capacity development activities through webinars, training sessions and workshops. The MEDREG Secretariat is located in Milan, Italy.

For more information, visit
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EXECUTIVE SUMMARY

Objective

MEDREG is committed to regularly providing an overview of the existing regulatory frameworks in its member countries as well as identifying the examples of good practice.

The first edition of the Regulatory Outlook, published in 2017, provided the first review of the competences of Mediterranean energy regulators and their role in the market. This 2020 edition of the Regulatory Outlook builds on the previous one but provides a more in-depth analysis of the current situation MEDREG members using a large set of metrics.

This report also addresses the current challenges in energy transition and offers a high-level analysis on organisational adaptation needs through a few case studies

Approach

This report is based on a collection of MEDREG members' replies to the questionnaire developed for the first edition of the Regulatory Outlook. This questionnaire was revised and enriched with

additional questions and information by the INS WG in 2020. Taking into account the work MEDREG carried out in 2014 to identify the Good Regulatory Principles, the questionnaire is divided into six main sections covering several aspects of national regulatory frameworks. They are shown below.

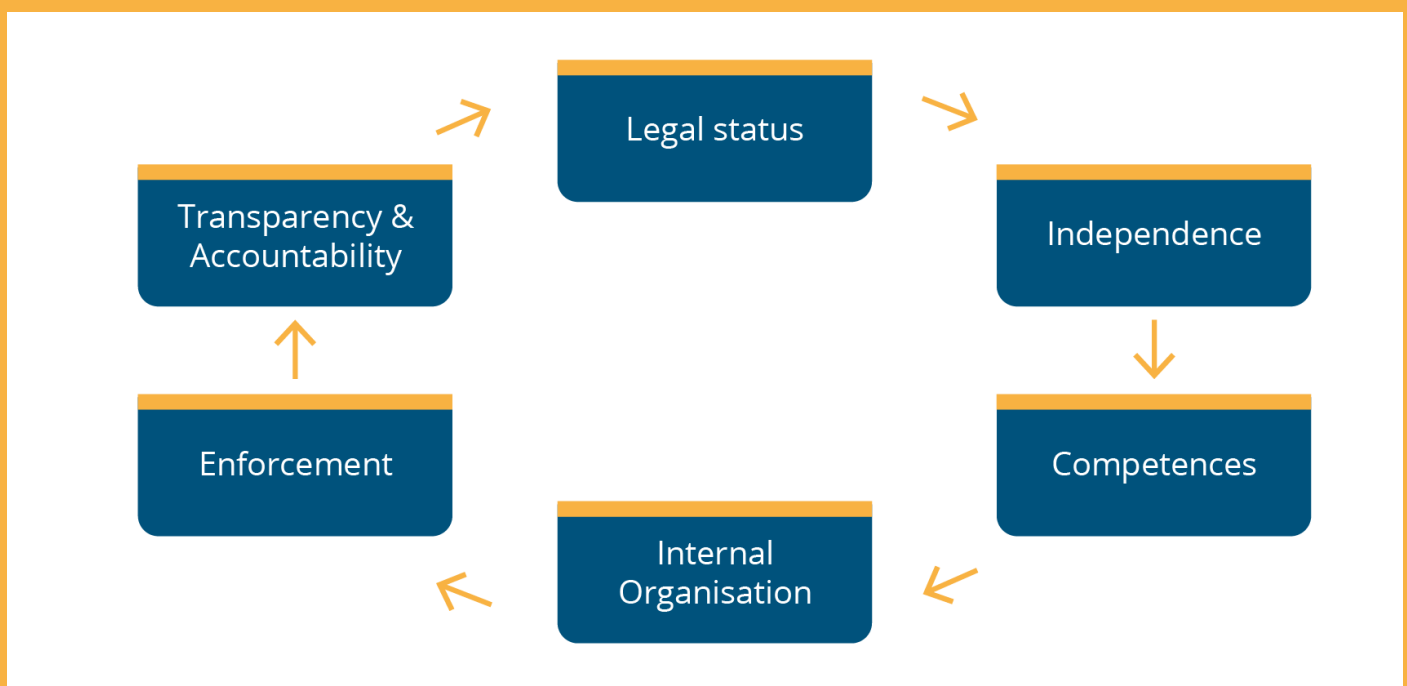
Responses were received from 20 regulators.

Findings

The following conclusions were deduced from the analysis:

- **Legal status:** In 20 countries in the Mediterranean region, the vast majority of National Regulatory Authorities (NRAs) are established by primary legislation. The NRAs are typically responsible for both electricity and gas, with the exemption of the NRAs of Egypt, Algeria and Israel, where distinct authorities are responsible for each sector. On some occasions, the NRAs are also responsible for other sectors, including the district heating, competition, water, oil and fuels, telecommunications and audio-visual sectors. The newest energy regulator is GasReg (Egypt), which was established in 2017. Regulators have not yet been established in Tunisia, Libya and Lebanon.

Figure 0 . Good Regulatory Principles



- **Political and legal independence:** Nineteen out of the 22 NRAs in the region are distinct and functionally independent from other public and private entities. In nine countries, the competent ministry or the government remains involved in regulatory decision-making. In these cases, the NRAs are obliged to report to the government, relevant ministries and other public bodies on ongoing regulatory procedures; they may also require direct approvals for certain types of regulatory decisions, such as tariffs and tariff methodologies.
- **Functional independence:** In all Mediterranean countries, there are mechanisms in place for parties to appeal a regulatory decision. Two NRAs reported that appeals were possible through the ministry, but the remaining ones reported that appeals were submitted either to the administrative court (15), supreme court (five) or an appeals tribunal (three).
- **Access to information:** Almost all NRAs have access to the financial information (such as accounts, operational details, agreements and personnel information) of the sector participants. However, some NRAs reported continued difficulties in obtaining complete data sets from existing vertically integrated incumbents.

Almost all NRAs prohibit their staff from being employed in the energy industry. In cases of non-compliance with the codes of conduct, 12 NRAs foresee the dismissal of the breaching member or employee.

In most cases, the board members and the chairman of an NRA continue to be appointed by the president, prime minister or relevant ministry. Only five out of the 20 NRAs that participated in the survey provided information on the appointment of the chairman and/or members of the board by the parliament. In most of them, the board members are not selected by the public but directly appointed by a proposal by the government, ministry or other authority.

Almost all NRAs are formally obliged to report in front of the government or parliament. Reporting is mostly accomplished through annual reports as part of their accountability obligations.

- **Financial independence:** Only a relatively small number of the NRAs are solely financed through national or state budgets. The NRAs' own resources mainly consist of license fees (12 NRAs), fines (five NRAs) and market participation fees (four NRAs). Other types of funding, such as donations and grants from international organisations, also contribute to the NRA budget. In most countries, an NRA's budget process is established by law. The regulatory authority may seek approval of its budget in front of other public governmental bodies. The approaches vary from country to country.
- **Security and quality of supply:** Almost all NRAs monitor the (i) medium- and long-term supply/demand balance in the national market, (ii) expected future demand and envisaged additional capacity, (iii) quality and level of network maintenance and (iv) quality of the supply. The powers granted to the NRAs regarding the tendering procedures for a new capacity vary from country to country. About 50% of the NRAs are involved in tendering procedures.
- **Market opening and market monitoring:** While the majority of MEDREG members have opened their electricity markets, market opening remains at different levels. Gas market liberalisation follows at a slower pace, with variations from country to country according to the legislative framework in place and country-specific circumstances. Typically, market opening, roadmaps to consumer eligibility and market design are formulated by law. Nevertheless, there are instances where NRAs are also empowered to propose electricity and gas market designs, such as Egyptera and GasReg (Egypt).

Among the NRAs that responded to the questionnaires, 80% confirmed that they are responsible for collecting information on market dominance as well as predatory and anti-competitive behaviour. Often, the NRAs cooperate with competition or antitrust authorities and financial authorities.

- **Tariff setting:** Most NRAs are now involved in approving tariff methodologies and fixing tariffs for transmission and distribution. The NRAs also may set the levels of public service gas supply, remuneration of the supplier of last resort (SoLR) and generation tariffs (in case of one vertically integrated incumbent and historical nuclear production). Most NRAs also have the power to include performance-based components in the tariff methodologies. Only 50% of the NRAs has the authority to penalise a non-performing undertaking via a reduced rate of return over the tariffs.
 - **Licensing:** The licensing of energy infrastructure is a practice adopted by all countries except France and Slovenia. However, the licensing mandate, particularly their issuance, often lies with the ministry rather than the regulator. When the license regime is managed by the regulator, the NRAs can have several powers depending on the legislation in place, including issuance, setting the terms and conditions of the license, modification and renewal, monitoring and imposing a fine upon the violation of terms and conditions. Only 10 NRAs reported on the average time taken to deliver a license, which ranged from one to two months from the date of application.
 - **Dispute settlement:** Almost all NRAs have a role in solving the disputes between operators and between operators and consumers. Topics addressed by the NRAs in the context of dispute settlements include grid access, cross-border issues, commercial behaviours, errors in billing, undue disconnections and switching or issues related to license holders' responsibilities.
 - **Unbundling:** All Mediterranean NRAs have a role with respect to utility unbundling; the sole exception is Tunisia, where there is no regulator and no legal obligation for the unbundling of the vertically integrated incumbent. The NRAs have a mandate to issue guidelines and rules for accounting unbundling, compliance, reporting and cost allocation.
 - **Technical competences:** The majority of the NRAs (17 out of 22) are involved in setting or approving standards related to the quality of supply and congestion rules (16 of 22). Fifteen NRAs are involved in issuing market rules and grid codes, defining metering rules and charges and setting incentives. However, in nearly half of the countries, the NRAs provide only an opinion on the development plans, while approvals are granted by the relevant ministries. Only a few NRAs maintain an audited account of revenues collected pursuant to congestion management mechanisms.
 - **Consumer protection:** Except for ANRE (Morocco), for which consumer protection is not included within the regulator's competences, all Mediterranean NRAs are responsible for customer protection in their regulated sectors; however, the level of responsibility differs from country to country. Five NRAs reported that they just implement government policies, whereas another five stated that they define the policies for addressing vulnerable customers' needs. Meanwhile, four NRAs set the prices for vulnerable customers.
 - **Internal organisation:** The majority of the NRAs are granted the power to decide on their internal organisation. However, in some of them, higher (or even lower) level organisation is set by law. Most regulators have the power to autonomously decide on their human resources policy, including hiring and firing staff as well as staff allocation and competences. The regulatory board is the final decision-making authority for the selection and appointment of staff members in 12 NRAs. In 10 NRAs, the regulatory board is also the final decision-making authority for removing and setting penalties and incentives for staff members, with possible limitations imposed by the state budget. In several NRAs, the employees' salaries are lower than those of personnel in the energy sector and at the level of civil servants. One NRA reported salaries even lower than those of civil servants.
- In most NRAs, there is no legal restriction on the number of staff members. However, in a few countries, the number of NRA employees is established by law, and an NRA does not have the flexibility to recruit additional personnel to meet needs if necessary.

- **Enforcement:** An overwhelming majority of the NRAs (17 out of 22) have the power to sanction sector participants when necessary. When violations occur, most NRAs cannot revise tariffs or reduce rates of return on non-compliant operators. Such an option is only available to eight NRAs.
- **Transparency and accountability:** Almost all NRAs publish information on their functioning (missions, duties, organisation chart and reports) via their website or through regular reports, including their annual report. However, not all of this information is available in English, and some NRAs continue not to have an English version of their website.

Mediterranean NRAs, with the exception of three members, consult stakeholders on draft regulations before making any final decisions. All NRAs have reporting obligations to other public bodies, such as the government, relevant ministry or parliament. Depending on the national legislation, some NRAs are also required to appear annually before a parliamentary committee.

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INTRODUCTION

The Mediterranean Regulatory Outlook 2020 provides a thorough review of the role and powers of the energy regulators in the Mediterranean region. This edition is an updated version of the first (2017) issuance. It provides a deeper country-by-country analysis, documents the most recent evolutions (2017–2020), discusses the remaining bottlenecks and offers relevant recommendations.

This edition is compiled in the context of two major events at the global level. One is energy transition, which is the global shift from fossil-based systems of energy production and consumption (such as oil, natural gas and coal) to renewable energy sources (such as wind and solar energy as well as batteries and renewable gases). Energy transition calls for a major redesign of the energy sector, including massive infrastructure deployment and support of novel technologies. The other is the COVID-19 pandemic, which has severely affected transport, trade and economic activity across the globe. The International Energy Agency (IEA) reports that countries in full and partial lockdown are experiencing a decline in energy demand corresponding to an average of 25% and 18% per week, respectively. The social effects are equally or even more drastic. This extraordinary global situation is expected to further shape the role of energy regulators. On the one hand, energy transition requires a stable regulatory environment that promotes innovation and investments. New regulatory methods and approaches may need to be first tested at the pilot scale before wide-range implementation (the so-called regulatory sandboxes). On the other hand, the economic downturn may have a negative effect on electricity security and energy systems' resilience while increasing energy poverty. To this end, the role of energy regulators in retail market monitoring is more important than ever, and the need to strike a balance between investor encouragement, state intervention and consumer protection has also increased.

As with the previous edition, this report aims to provide

- useful insight to Mediterranean regulators regarding the role and tasks of their fellow

regulators in neighbouring countries so that they can improve their approaches and practices in this challenging new era; and

- consolidated and up-to-date information to stakeholders and potential investors regarding the role of regulators in new investments.

The Regulatory Outlook 2020 will also help MEDREG members refine forthcoming activities and secure a consistent and robust regulatory climate in the Mediterranean amidst this exceptional global situation. MEDREG will be also sharing this report with the European Union (EU) for the UfM REM Platform for the purpose of defining the common grounds of potential coordinated actions.

This report is structured as follows:

Section 2 outlines the report's context in more depth and describes the methodology adopted for data collection, i.e. the circulation of questionnaires to MEDREG members. The topics addressed in the questionnaire have been structured along the Good Regulatory Principles identified by MEDREG in 2014¹.

Section 3 provides further insight into each principle to lay out the benchmarks along which the analysis is structured.

Section 4 summarises the results from the evaluation exercise, thus providing a high-level overview of the status of energy regulation in the Mediterranean Region in 2020.

Section 5 presents the regulatory frameworks and competences of MEDREG members in detail. As discussed in the introduction, energy transition is creating new challenges and calls for novel and versatile regulatory design for bridging innovation and market functioning. Section 6 discusses regulatory innovation through a few case studies. Section 7 summarises the main findings and recommendations.

¹ Med14-18GA-4c INS, Good Regulatory Principles in the Mediterranean Countries, Glossary of the core governance principles.

CONTEXT AND METHODOLOGY

The Mediterranean Regulatory Outlook is an important report for identifying the regulatory frameworks that can improve the role and independence of Mediterranean energy regulators.

As part of the action plan of the Institutional Working Group (INS WG) for the period 2016–2018, MEDREG undertook the first edition of the Mediterranean Energy Regulatory Outlook in 2017. It provided recommendations for the development of regulatory approaches in the region as part of the ultimate goal of encouraging a consistent and robust regulatory climate in the Mediterranean.

The first edition was not only useful for MEDREG members but also achieved good results in terms of visibility for the organisation. Therefore, the INS WG decided to develop the second edition of the Regulatory Outlook in 2020, including the report in its action plan for 2020–2022.

This report is based on the members' replies to the questionnaire developed for the 2017 edition of the Outlook. The questionnaire was revised and updated with additional information by the INS WG in 2020. The list of questions is divided into six sections that reflect the six Good Regulatory Principles, which describe energy regulatory frameworks according to the following aspects:

To ensure consistency in the responses, the questionnaires for this edition were structured as sets of multiple choice questions, with provisions for additional written explanations. The table 2 lists the NRAs that responded.

Table 1 . MEDREG Good Regulatory Principles

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

Table 2 . List of MEDREG regulators that replied to the questionnaire

Country	National Regulatory Authority	Replies to questionnaire
Albania	Albanian Electricity Regulatory Authority (ERE)	Received
Algeria	Electricity and Gas Regulation Commission (CREG)	Received
Algeria	Autorité de Régulation des Hydrocarbures	Not received
Bosnia and Herzegovina	State Electricity Regulation Commission (SERC)	Received
Croatia	Croatian Energy Regulatory Agency (HERA)	Received
Cyprus	Cyprus Energy Regulatory Authority (CERA)	Received
Egypt	Egyptian Electricity Utility and Consumer Protection Regulatory Agency (EgyptERA)	Received
Egypt	Gas Regulatory Authority (GasReg)	Received
France	Regulatory Commission of Energy (CRE)	Received
Greece	Regulatory Authority for Energy (RAE)	Received
Israel	Public Utilities Authority – Electricity (PUA)	Received
Israel	Natural Gas Authority (NGA)	Received
Italy	Italian Regulatory Authority for Energy, Networks and Environment (ARERA)	Received
Jordan	Energy and Mineral Regulatory Commission (EMRC)	Received
Lebanon	Lebanese Center for Energy Conservation (LCEC)	Not received
Lybia	Ministry of Energy	Not received
Malta	Regulator for Energy and Water Services (REWS)	Received
Montenegro	Energy Regulatory Agency (REGAGEN)	Received
Morocco	National Electricity Regulatory Authority (ANRE)	Not received
Palestine	Palestine Electricity Regulatory Council (PERC)	Received
Portugal	Energy Services Regulatory Authority (ERSE)	Received
Slovenia	Energy Agency for the Republic of Slovenia (AGEN-RS)	Received
Spain	National Commission on Markets and Competition (CNMC)	Received
Tunisia	Ministry of Energy, Mines and Renewables (MIT)	Not received
Turkey	Energy Market Regulatory Authority (EMRA)	Received

3

OVERVIEW OF THE QUESTIONNAIRE

3

OVERVIEW OF THE QUESTIONNAIRE

The questionnaires were structured around the Good Regulatory Principles identified by MEDREG. These are presented below in detail so as to provide a basis for the analysis presented in the following sections.

3.1 Legal status

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

3.2 Independence

Independence from national and regional governments and the industry guarantees regulatory stability and neutrality and avoids situations where the decisions of the regulators are constantly modified or influenced. This crucial feature is analysed according to different points of view. This analysis also considers the practical measures and provisions put in place to guarantee the independent behaviour of the board and staff members.

3.2.1 Political and legal independence

One of the most important regulatory principles is the full independence of the regulators from

political and industrial interests, such as from national and regional governments, political organisations and any public or private body. Different relationships with other institutions, such as the government, relevant ministry or parliament, are investigated in terms of formal obligations (for instance, submitting tariff methodology or annual activities report) and influence on board members (the power to appoint or revoke them).

MEDREG members were asked to describe the constraints board and staff members may be subjected to when they join or leave a regulator as well as the consequences of non-compliance with said constraints. To prevent conflicts of interest, these constraints may forbid holding energy companies' shares, being employed in regulated entities during office term or not joining a regulated entity after the end of their service in the regulatory body (cooling-off period).

3.2.2 Financial independence

The independence of a regulatory authority may be subjected to undue that limit the financial resources it is eligible to receive. This may severely affect a regulator's pursuit of its mission. Thus, the members were asked to describe their financial sources (such as the national budget, market participation fees and fines) and their autonomy in elaborating and approving the budget. They were also asked to explain whether any external control affected their activities.

3.2.3 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 which energy sector parties may appeal to for defending their interests. 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.

3.3 Competences

The duties and powers of a regulator should constitute a minimum set of competences defining its specific responsibilities to promote competition and empower consumers. Regulatory competences generally refer to monitoring (including access to information), tariff setting, rulemaking, dispute settlement and consumer protection.

3.3.1 Access to information

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

3.3.2 Security and quality of supply

Depending on the legislative framework, the regulators may be in charge of monitoring the evolution of the demand as well as the infrastructures necessary to guarantee appropriate security for the supply; they may even provide support to elaborate and implement the required actions, such as organising and managing tendering procedures for new infrastructures.

Moreover, the regulators may monitor the main features of network development and operation to, for instance, elaborate a regulation to incentivise better performances in the services to be delivered to the consumers. This means monitoring the quality of supply in terms of the number and frequency of interruptions, the frequency and voltage stability in the electric

networks, the pressure and the calorific values of the provided gas.

3.3.3 Market opening and market monitoring

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

However, considering the inner nature of energy sectors, which are characterised by goods delivered through natural monopolies such as power or gas networks, the role of a regulator is crucial in evaluating and observing the evolution of energy markets in order to intervene and correct potential distortions. Such continuous monitoring may limit abuses and market manipulations. This can pave the way for fair competition and consumer protection, even considering the support of other institutions, such as competition authorities or ministries.

The regulators must be allowed to collect data from the regulated entities and directly from the stakeholders; this will facilitate receiving feedback from the grassroots to correct and improve the regulations.

3.3.4 Tariff setting

One of the important competences of the NRAs is the power to fix transparent and non-discriminatory tariffs for the 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 cross-subsidies amongst network users.

The regulators should be responsible for fixing or approving such tariffs in order to guarantee the economical sustainability of network development and ensure that the costs imposed on the consumers are duly economically justified.

3.3.5 Licensing

A regulator may be in charge of supporting or being directly involved in a license regime to build

well-designed energy infrastructure plans for the short and long term (such as networks, generation power plants, gas storages and liquefied natural gas (LNG) regasification units). These may consist of different phases, including issuing licenses, determining terms of reference, monitoring its compliance and 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 non-discriminatory.

3.3.6 Dispute settlement

The regulators have a super partes role in the energy sector, promoting its non-discriminatory, fair and transparent development and operation; thus, they may be asked to settle disputes between stakeholders. Considering the asymmetrical market power and knowledge between the industry and its consumers, the regulators tend to set up different mechanisms to solve such litigations in the most simple and economic manner. They should support smaller consumers in affirming their rights and reduce the loss of time and money for both parties by, for instance, avoiding appealing to a court.

In more advanced cases, the regulators may intervene in disputes between industry operators, such as when infrastructure access is not guaranteed according the timetable reported in the license.

3.3.7 Unbundling

To guarantee the aforementioned non-discriminatory and transparent access as much as possible, energy infrastructures should be developed and managed according to clear and transparent procedures. It is important 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 operator (ITO). An extensive and complete knowledge of the costs of regulated entities – such as transmission system operators (TSOs), distribution system operators (DSOs) and others – allows regulators to set cost-effective tariffs to be transferred to the end

users. Infrastructure “neutrality” may be ensured more effectively with a complete separation between market-oriented operators and natural monopolies.

3.3.8 Technical competences

A regulator’s mission should be characterised by detailed instructions, provisions and guidelines for ruling the regulated sectors according to the Good Regulatory Principles. For this, the regulators are authorised to concretely and effectively discipline and orient the regulated entities (metering rules, transmission capacity allocation, grid codes and others) towards the general scopes assigned by the legislative and regulatory frameworks to the energy sector: partial or entire market opening, consumer protection, investments promotion and security of supply.

3.3.9 Consumer protection

Consumer protection is another significant factor that should be in every regulatory authority’s charge for the development of the energy market. The relevant asymmetric knowledge between consumers and industries requires regulators to raise awareness about consumer rights, facilitate simple and cheap access to dispute settlement, ensure the high quality of services and, in some cases, provide tariffs to support more vulnerable consumers. A number of instruments may be put in place for these purposes, such as compliant management, price comparison tools, information campaign and alternative dispute resolution processes. They should have adequate power to sanction sector participants in case of non-compliance.

3.4 Internal organisation

Effective organisation requires clear decision-making processes and an operative internal structure with distinct roles and responsibilities. Moreover, since the staff members must possess high-level skills, the regulators were asked to describe their recruitment processes and human resources management while also referring to economic issues, training and carriers’ dynamics. These aspects may be relevant for attracting and retaining experts from industries, where most of the technical and regulatory skills are found.

To collect such features, the regulators were asked to evaluate their information technology (IT) and human resources (HR) budgets as percentages of their total budget and also indicate the total number of employees in main departments.

3.5 Enforcement

Enforcement involves ensuring the compliance of the market participants and regulated entities with the rules in order to obtain the public benefit provided by regulation. Moreover, only real powers provide a regulator with a “watch dog” role that can effectively elicit full compliance from the sector participants.

Therefore, the regulators were asked to describe the mechanisms used to sanction sector participants, such as reducing tariffs or applying fines, and whether they have been practically applied, such as evaluating the total amount of the fines.

3.6 Transparency and accountability

Transparency in the regulatory process helps others understand a regulator’s work and is beneficial for proactive stakeholder engagement. Accountability means that a regulator takes on 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, such as publishing detailed information on their websites or issuing annual reports.

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

Finally, the processes of accountability are investigated. Public bodies may be invited to inquire into the regulators’ main activities and results, not only when required by legislation but also in front of stakeholders, thus enhancing the regulators’ accountability.

4

GENERAL OVERVIEW OF MEDITERRANEAN ENERGY REGULATION

4

GENERAL OVERVIEW OF MEDITERRANEAN ENERGY REGULATION

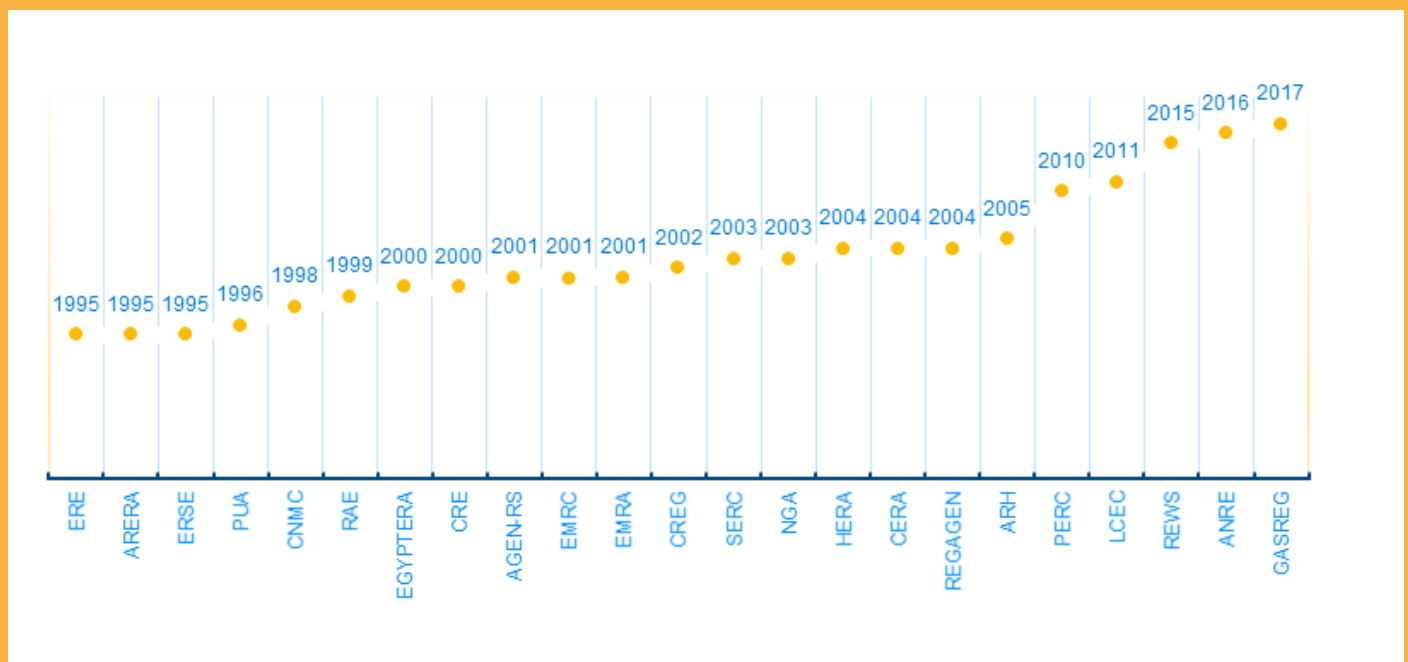
The following section presents a general overview of the status of energy regulation in the Mediterranean Region in 2020. The results provide an aggregated investigation of all six Good Regulatory Principles, which are analysed one by one.

4.1 Legal status

In the Mediterranean region, NRAs are currently established in 20 countries, the most recent one being GasReg (Egypt) in 2017. In total, among the 27 members, 23 are NRAs and four are ministries. In some cases, a certain period of time elapsed between the legal establishment of the NRA and the actual initiation of its activities in the market. The year of establishment of each Mediterranean regulator is shown in Figure 1.

The majority of these NRAs regulate both the electricity and gas markets. In general, when an NRA regulates only electricity, it is due to the assignment of the natural gas market regulation to a separate authority, such as with GasReg (Egypt) and NGA (Israel). In the case of ARH and CREG (Algeria), the regulation of the gas market is divided between the two; CREG is responsible for the distribution of the gas market, and ARH is responsible for the regulation of hydrocarbons and gas export. The absence of natural gas markets in the country may also affect the functioning of an NRA, such as in the case of PERC (Palestine). The purview of some NRAs includes the activities of other energy sectors, such as oil, fuels and district heating and cooling. A few are multisector regulators as they regulate water services (ARERA, Italy; REWS, Malta; REGAGEN, Montenegro), waste (ARERA, Italy; REGAGEN Montenegro), electric mobility

Figure 1 . Year of establishment of Mediterranean energy regulators



network (ERSE, Portugal) and the competition, telecommunications, audio-visual, transport and postal sectors (CNMC, Spain). An overview of the regulated sectors is given in Figure 2.

All NRAs are public bodies created through primary legislation (law), secondary legislation or by a combination of the two, as outlined in Figure 3.

In nine regulators – namely CREG (Algeria), CRE (France), PUA and NGA (Israel), ARERA (Italy), ANRE (Morocco), PERC (Palestine), ERSE (Portugal), CNMC (Spain) and EMRA (Turkey) – additional bodies are also involved in the regulatory decision-making. These may include the government or relevant ministry, and their involvement ranges from reporting to the government, relevant ministries and other public bodies about a certain ongoing

regulatory procedure (e.g. ERSE²) to requiring the regulators to obtain direct approvals for a certain type of regulatory decisions, as in the case of tariff methodologies and tariffs. On other occasions, the NRAs are called on to implement guidelines approved by governmental bodies.

Other than the creation of GasReg, there have been no notable changes under this criterion in comparison to the 2017 edition.

4.2 Independence

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

² ERSE has a legal obligation to report the regulation procedures to be implemented to the competent bodies.

Figure 2 . The sectors regulated by Mediterranean energy regulators

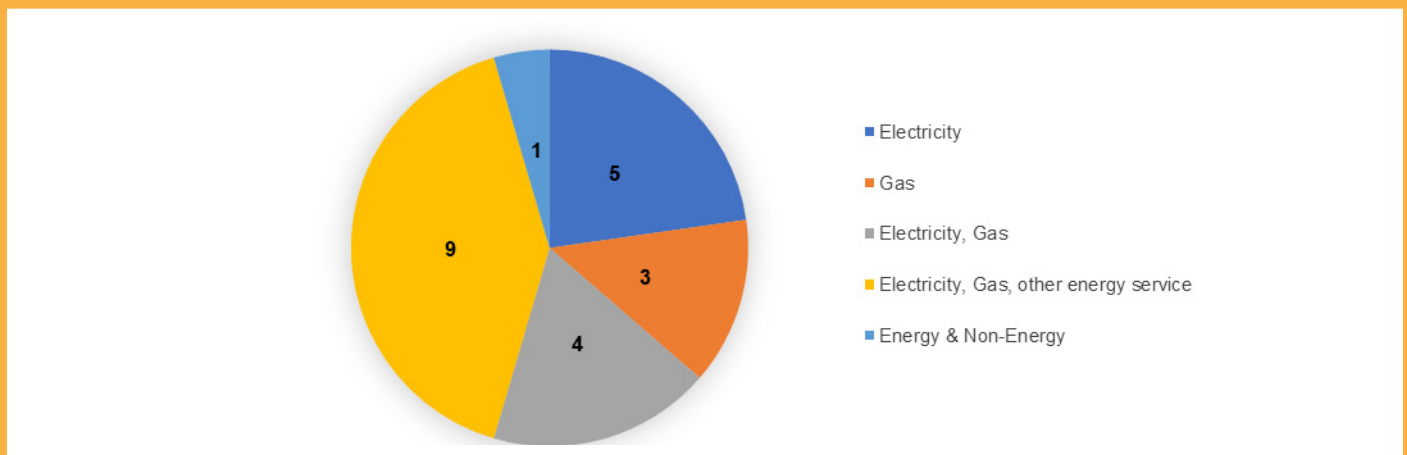
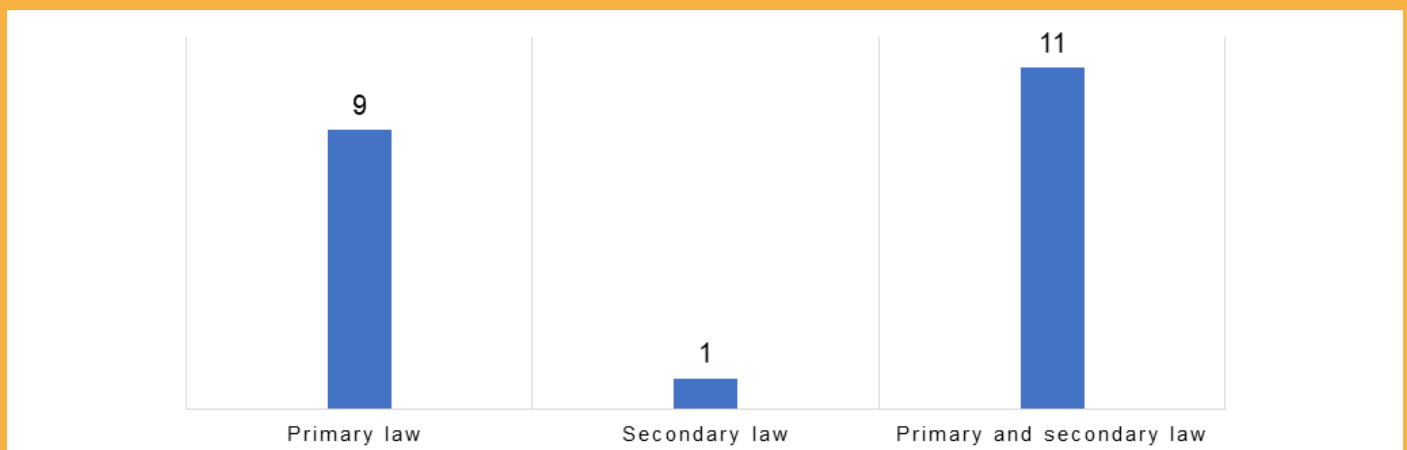


Figure 3 . Legislation ruling the energy sector in the Mediterranean region



4.2.1 Political and legal independence

Overall, there have been no changes from the 2017 edition of this report regarding political and legal independence. A detailed analysis is given below.

In terms of political and legal independence, 19 of the 22 NRAs are distinct and functionally independent from other public or private entities. The two regulators in Israel are partially independent. The electricity regulator, PUA (Israel), was in fact constituted inside the Ministry of Energy. Thus, the minister can influence its decisions to a certain extent, with the exception of the legal department, intern controller, budget and tariffs, which are completely independent. Meanwhile, the gas regulator, NGA (Israel), is not fully independent as it is part of the Ministry of Energy. Tunisia does not have an NRA, and all functions related to energy regulation are undertaken by the Ministry or bodies affiliated to it.

However, most NRAs and their regulatory functions are generally autonomous from the government as well as other public or private entities. Regulation is generally an activity distinct from energy policy, but exemptions do exist.

CERA (Cyprus) is legally distinct and functionally independent from any other public or private entity, including ministries or governmental departments. However, CERA receives direct instructions from the Minister of Energy concerning public service obligations and, in certain cases, licensing criteria.

The independence of CRE (France) board members and staff is guaranteed by law. However, independence does not mean isolation, which is why CRE contributes to the proper functioning of the electricity and natural gas markets in line with the energy policy objectives defined by law. Therefore, the French Ministry of Economy and/ or the Ministry of Sustainable Development may give CRE directions or instructions that fall under the law, such as in the organisation of tendering procedures for RES (renewable energy sources) capacity or on long-term goals. However, the ministries do not have veto power and cannot overturn CRE's decisions.

EMRC (Jordan) is independent, but in some specific cases, the prime minister can influence its decisions within reason.

GasReg (Egypt) is also an independent organisation. However, according to the law, the gas market design must be approved by the Council of Ministers, and all Egyptian laws are ratified by the parliament.

The NRAs of two countries are not fully autonomous:

- PERC (Palestine) may receive instructions from other public entities formally or informally.
- In Tunisia, regulatory functions are undertaken by the Ministry or affiliated bodies, and there is a substantial role clarity between them.

With the exception of EMRC (Jordan), the NRAs have formal rules that prohibit their staff from being employed in the energy industry while keeping their position at an NRA. In cases of non-compliance to the codes of conduct, including the above, 12 NRAs foresee the staff member's dismissal or removal. The consequences can include fines (ARERA, Italy), administrative penalties (RAE, Greece) or criminal sanctions if a law is violated (CRE, France and NGA, Israel). Independence is guaranteed by formal rules that prohibit NRAs from having interests in the regulated utilities or being in leading political positions. These rules exist in 19 NRAs. The consequences of such behaviour are similar to those previously listed.

Regulatory decisions are binding for the affected parties and can be appealed only in court. A few exemptions are identified. An appeal against HERA (Croatia) can be submitted to the ministry if the NRA passes a resolution ordering an energy undertaking that has a cancelled license or stopped performing an energy activity to transfer its plants, facilities, appliances, network or system to another energy undertaking. Moreover, certain types of permits are subject to ministerial approval, such as in PUA (Israel). GasReg is entitled to resolve the complaints that arise between the gas market parties through a dedicated committee.

Almost all NRAs are formally obliged to report in front of the government or the parliament. This is mostly accomplished through annual reports as part of their accountability obligations. Other interactions between an NRA and the relevant ministry (or government) concern the

latter's approval of the NRA's draft budgets (also discussed in Section 4.2.2) and work plans. In some cases, the NRAs also serve as advisories to the relevant ministry or government on specific topics, such as the national (energy related) development plan, security of supply and, in a few cases, tariff methodology. Figure 4 describes the most common formal obligations of the NRAs towards their respective governments or parliaments. Overall, no major differences from the findings of the 2017 edition were identified.

However, though most NRAs are legally independent to a great extent, their board members and chairmen are mostly appointed by the president, prime minister or relevant ministry.

Only five out of the 20 participating NRAs reported that the chairman and/or members of the board were appointed by the parliament (Figure 5). Clearly, these appointments by the government – as opposed to the parliament, where there is representation of all political parties – jeopardise the political independence of an NRA. Overall, the selection process of the NRA board is crucial in securing its independence. For this edition of the Regulatory Outlook, the selection process has been surveyed in depth, as reported below.

In a number of NRAs, the nomination of board members involves different public entities. For instance, for CREG (Algeria), ARERA (Italy) and CNMC (Spain), the nominations come from

Figure 4 . Formal obligations of the NRAs to the government and parliament

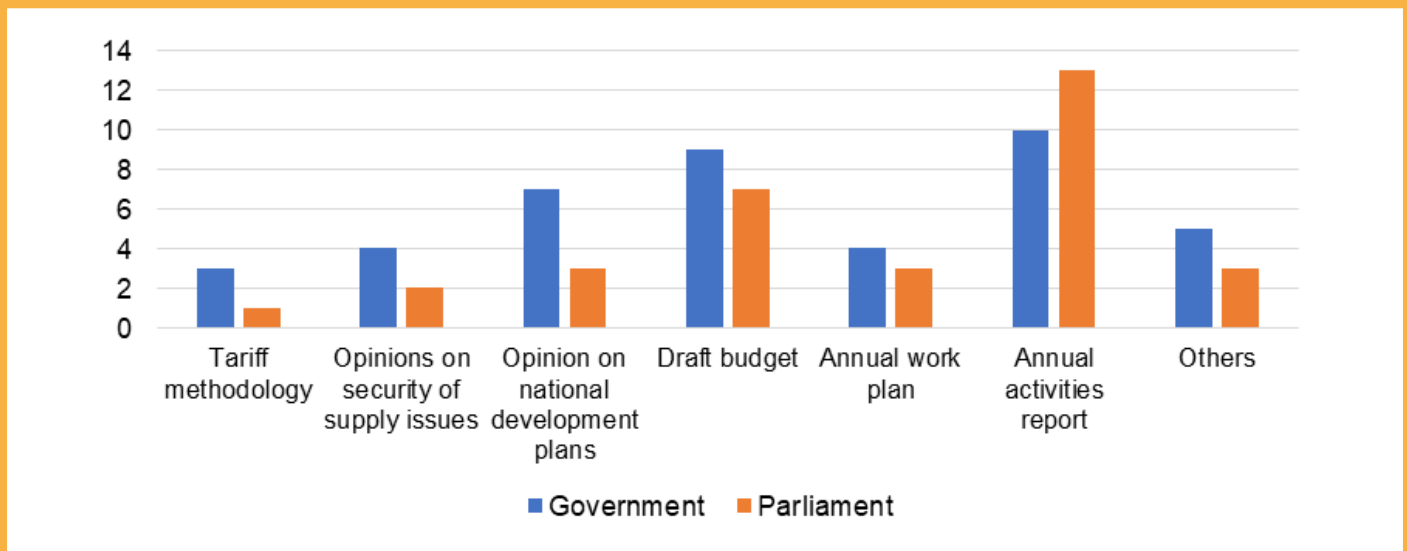
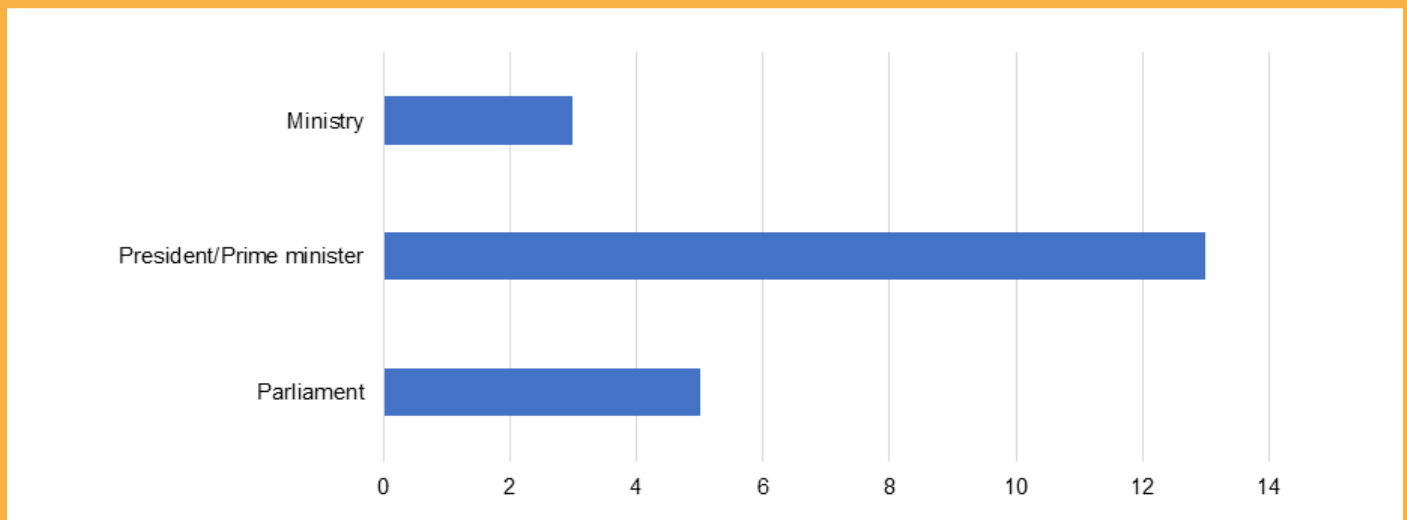


Figure 5 . Board members' nominations



the government, following a proposal from the competent ministry. The parliament may also have the power to approve the nominations. In the case of ARERA (Italy), the nominations are submitted to the competent parliamentary committees for scrutiny, and the appointment is based on a two-thirds majority vote. For CNMC (Spain), the parliament may veto the appointment by an absolute majority vote within one month. In HERA (Croatia), the parliament also approves the board members, following a proposal from the government. Finally, for the council of ANRE (Morocco), which comprises nine members and the president, three members are appointed by a decree, three by the president of the House of Representatives and the remaining by the president of the Chamber of Advisers.

Although this information indicates that a few NRAs are politically independent, for the most part, the board members are not selected through a public call but rather directly through a proposal by the government, ministry or other competent authority. Meanwhile, the majority of NRAs use public calls for hiring the staff (Figure 6).

A public call usually includes the selection criteria for the potential candidates as well as a selection committee for evaluating the applicants (Figure 7).

In almost all of the NRAs (16 out of 22), the terms of office for the chairman and board members are fixed with renewal mandates. A maximum of two renewals was reported. The removal of

Figure 6 . Formal obligations of the NRAs to the government and parliament

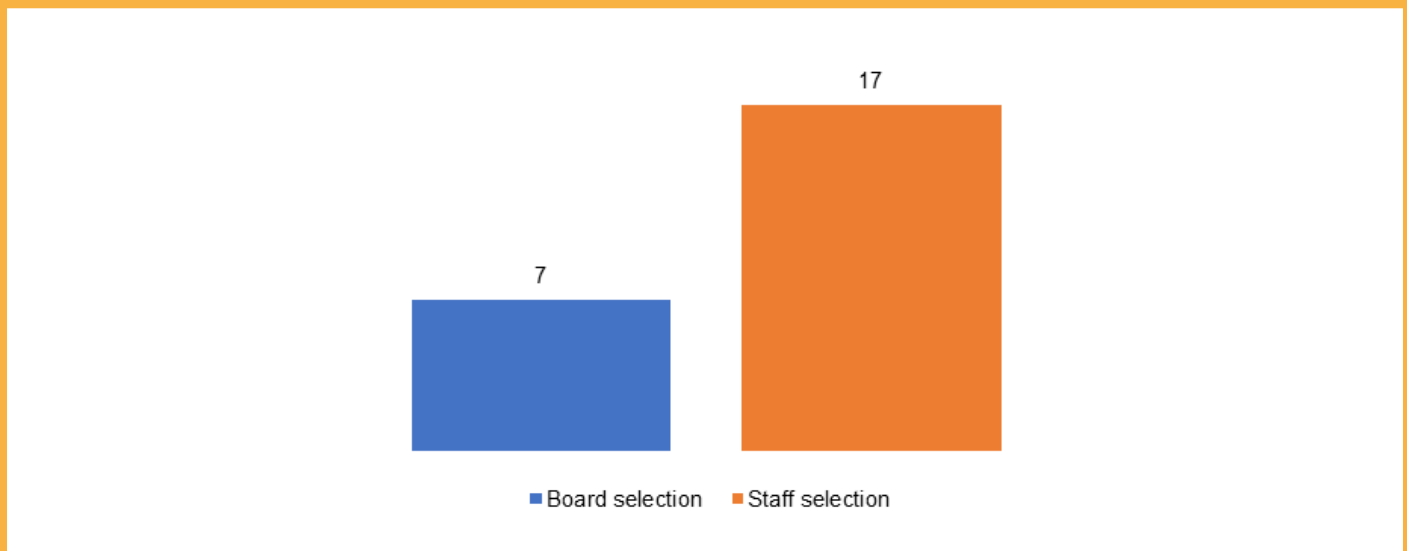
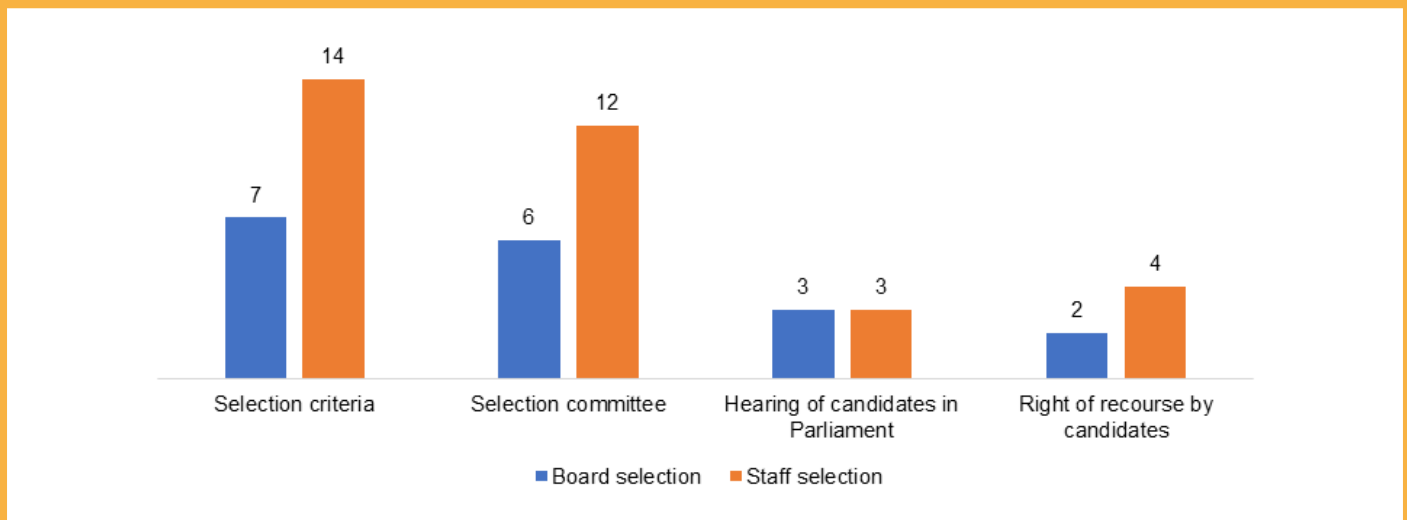


Figure 7 . Board members' nominations



board members is subject to specific conditions, such as conflicts of interest, criminal records, ailing health and non-performance or misconduct in the fulfilment of their duties and responsibilities for a certain time frame. Among the NRAs, only HERA (Croatia) reported a revocation of appointment or removal from office on one occasion.

To further strengthen their independence, 14 NRAs implemented an additional practice; they have stipulated a period of time in which the board members and/or staff cannot be engaged with the regulated entities after their service in the regulatory body. The length of this cooling-off period varies from country to country, with the maximum being three years in France.

4.2.2 Financial independence

Financial autonomy is essential for the independence of an NRA. This is recognised by the legal framework

in several Mediterranean countries. Only a relatively small number of NRAs – namely CRE (France), PUA and NGA (Israel), PERC (Palestine) and CNMC (Spain) – are solely financed through national state budgets (Figure 8).

The NRAs' own resources mainly consist of license fees (12 NRAs), fines (five NRAs) and market participation fees (four NRAs). Other types of funding may also contribute to an NRA's budget (Figure 9). This may include donations and grants from international organisations (Egypt ERA, Egypt and EMRA, Turkey), profits from the sales of publications and studies (ERSE, Portugal and EMRA, Turkey) and fees from participating in international scientific programmes (RAE, Greece). CREG (Algeria), along with the license fees, collects an amount from the end consumers; this is specified by the tariff decisions adopted and published by CREG in accordance with a decree. The distinctions in the sources of funding are detailed in Figure 9.

Figure 8 . The NRAs' sources of funding

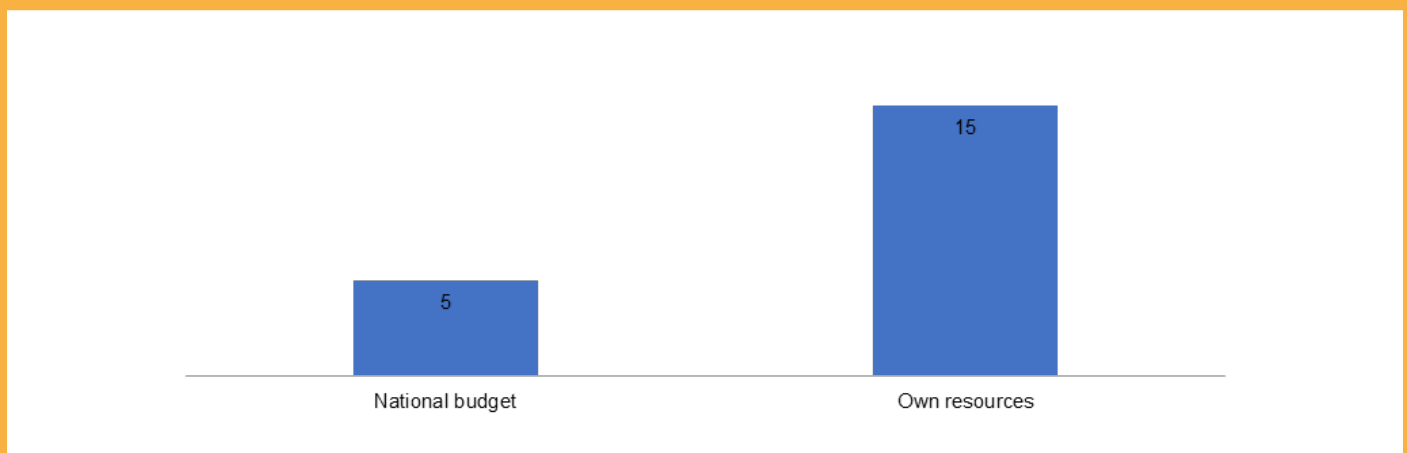
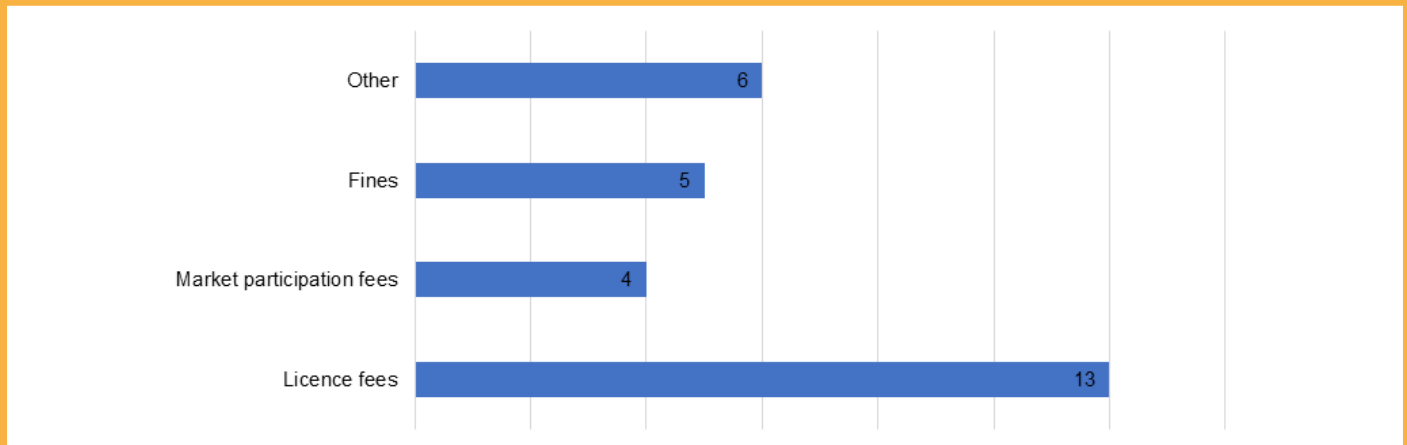


Figure 9 . Categories of funding in the NRAs' own resources



Fees are autonomously defined by 11 NRAs. In the others, they are set by law or the government. In most cases, the governmental bodies may provide some input regarding the manner in which an NRA's own resources are used.

In most countries, the budget process of an NRA is established by law. It may seek approval for its budget from other public governmental bodies, which vary from country to country (Figure 10).

Only six NRAs do not have to get their budgets approved. In general, the budget approval procedure can also involve exchange and authorisation with different governmental entities. For instance, the approval may be given by both the parliament and the government (CERA, Cyprus) or by just the parliament upon consultation and agreement with the Ministry of Economy and Finance (CRE, France and NGA, Israel). As the NRAs are public entities somehow linked to other public bodies in the definition of the budget, almost half of them are subject to constraints arising directly or indirectly from the central budget. RAE (Greece) follows the Greek parliament's approval processes for the total budget of the state, and its execution is monitored by the Ministry of Finance and the relevant parliamentary committee. All NRAs stated they are subject to an annual financial review by external auditors, which are either private or public entities. As a general remark, the NRAs should be given more support in terms of financial independence.

In Bosnia and Herzegovina, the budget is adopted by SERC and presented to the Parliamentary

Assembly of Bosnia and Herzegovina. This provision implies that the parliament can analyse and comment on the presented budget but does not have the right to reject the budget or change any item in it.

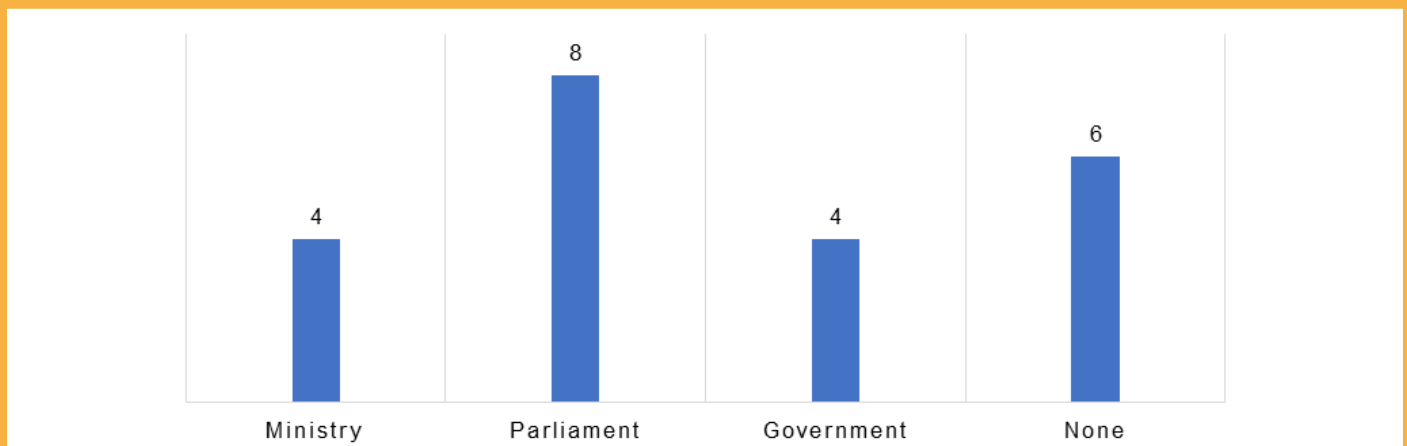
In reference to the 2017 edition, no major changes are identified; nevertheless, this analysis provides further clarity about the number of NRAs that are funded through their own resources and are not subject to the approval processes of other state bodies. It also helps identify other sources of NRA funding in addition to fees and fines.

4.2.3 Functional independence

In all Mediterranean countries, there are mechanisms in place to allow parties to appeal a regulatory decision. With the exception of two NRAs that reported possible appeals through the ministry (see Section 4.1), the rest stated that the appeals are taken either to an administrative court (15), the supreme court (five) or an appeals tribunal (three), as shown in Figure 11. Overall, this indicates considerable progress regarding functional independence.

The decisions of the NRAs remain in effect pending appeal except for ARERA (Italy) and, partially, PUA (Israel), where it depends on the judge's decision. Overall, the NRAs have comparable satisfactory levels of independence, which guarantees regulatory stability and neutrality and avoids situations in which their decisions are constantly modified or influenced.

Figure 10. The NRAs' budget approval obligations



4.3 Competences

4.3.1 Access to information

In this edition of the Regulatory Outlook, the NRAs' access conditions to a wide range of information from the sector participants, such as financial, technical and commercial data, were reviewed in further detail.

Except for NGA (Israel), the NRAs have full access to the financial information (such as accounts, operational details, agreements and personnel information) of the sector participants. NGA (Israel) may obtain complete information from the utilities upon request and only from the regulated entities. Furthermore, all NRAs have full access to technical information from the utilities, though a few NRAs reported some difficulties in obtaining complete data sets. For instance, ANRE's (Morocco) level of access to the incumbent's financial and technical information is not explicitly addressed by law, but ANRE can obtain this information in significant detail as it is responsible for both the approval of the rules related to ONEE's³ unbundling of accounts and the approval of transmission and distribution tariffs.

4.3.2 Security and quality of supply

Almost all NRAs monitor the (i) medium- and long-term supply/demand balance in the national market, (ii) expected future demand

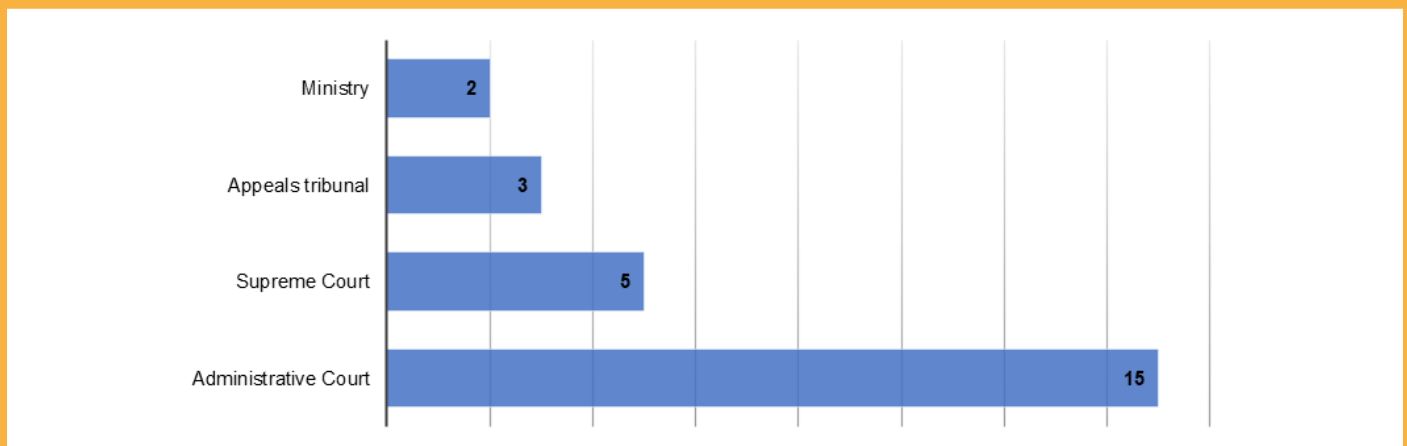
³ Office National de l'Électricité et de l'Eau potable

and envisaged additional capacity, (iii) quality and level of network maintenance and (iv) quality of the supply. Additional indicators may be also monitored depending on the sectors each NRA is mandated to regulate.

Typically, the regulators of EU member states and Energy Community contracting parties analyse the consistency of network development plans and approve the plans submitted by the electricity and gas system operators as this is a mandate stemming from EU legislation. Furthermore, in many cases – in CRE (France), for instance – as part of a multi-annual programming of electricity production, if the projected production capacities do not meet the forecasted demand, the energy minister may initiate a tendering process. CRE is responsible for the implementation of this tendering process. In the gas sector, Article L. 452-3 of the Energy Code allows CRE to put in place “appropriate short- or long-term incentives to encourage operators to improve their performance linked in particular [...] to the integration of the internal gas market, security of supply [...]”. In its deliberation on February 22, 2018, CRE set the terms and conditions for the marketing of gas storage capacities for the year 2018–2019. The primary objective pursued by CRE in the context of the storage reform has been to maximise capacity subscriptions to improve the filling of storage facilities, which has reached particularly low levels in previous years; thus the supply security can be improved.

Most Mediterranean NRAs participate in the implementation of measures to meet the peak

Figure 11 . Entities that handle the appeals of regulatory decisions in MEDREG countries



demand and address any shortfalls of the suppliers, solving such issues by law or through the provisions of supplier of last resort (SoLR). Sometimes, this role is covered by other entities (such as network operators), but the NRAs are always in charge of monitoring and reporting.

The powers granted to the NRAs regarding the tendering procedures for a new capacity, infrastructure or investment vary from country to country. Almost 50% of the NRAs are involved in tendering procedures, but there are diverse methods among the NRAs regarding several topics related to the tendering process. In this regard, it can be said that the coherence of the monitoring provisions of the NRAs concerning the security and quality of supply varies too much in the region. More alignment should be facilitated.

4.3.3 Market opening and market monitoring

The status of market opening in the Mediterranean region is very diverse from country to country. The majority of MEDREG members have opened their electricity markets, though at different levels. Gas market liberalisation follows at a slower pace, with variations from member to member according to the legislative framework in place. Typically, market opening, roadmaps to consumer eligibility and market design are formulated by law. Nevertheless, there are instances where an NRA is also empowered to propose electricity and gas market designs, such as Egyptera and GasReg (Egypt).

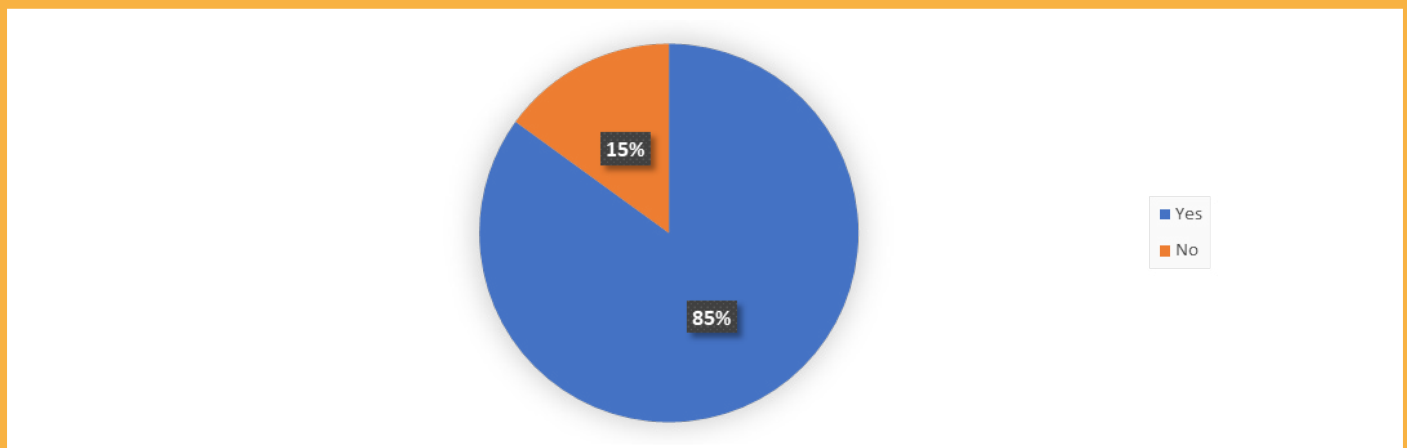
Market monitoring is a prerequisite for EU member states and Energy Community contracting parties

from EU legislation as well as for some other MEDREG members, such as EMRA (Turkey), EMRC (Jordan) and ANRE (Morocco). Eighty percent of the NRAs confirmed that they are responsible for collecting information on market dominance and predatory and anti-competitive behaviour (Figure 12). Often, the NRAs cooperate with competition or antitrust authorities. Cooperation with the financial authorities is also foreseen (France, Greece, Israel, Portugal and Slovenia). Selected examples of the types of market monitoring exercised by the NRAs are provided below.

CERA (Cyprus) has the right to collect information and investigate all cases or complaints; it also has the responsibility to ensure that there are appropriate and effective mechanisms for management control and transparency so as to avoid any abuse of a dominant position. Furthermore, it can issue an order only after consulting with and obtaining the agreement of the Commission for the Protection of Competition Law.

CRE (France) has been assigned the mission of monitoring the wholesale electricity and natural gas markets; in particular, it must ensure that the offers made by the 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 that determine supply and demand. As in the case of the other European regulators, CRE's task of monitoring wholesale markets is also part of the framework of the EU Regulation on Energy Market Integrity and Transparency, called REMIT, which prohibits market abuses in wholesale electricity and gas

Figure 12. The NRAs' competences in collecting information on market dominance and predatory and anti-competitive behaviour



markets. As part of this task, CRE compiles annual reports on the functioning of wholesale markets.

RAE (Greece) monitors electricity and gas markets as per the relevant EU legislation, with the exemption of antitrust rules, for which only the Hellenic Competition Commission is responsible. For REGAGEN (Montenegro), the law prescribes that if the control identifies irregularities in the operation or process of an undertaking that are contrary to the rules of competition, supply safety and customers' protection and safety, the NRA should inform the authority responsible for competition or customers' protection. Moreover, the NRA should perform direct monitoring over the functioning of the electricity and gas markets and impose measures for the elimination of the identified deficiencies in market functioning. It should also cooperate with the body responsible for competition, financial market regulators and the competent Energy Community's body during research related to competition issues.

Finally, most NRAs play a role in prohibiting abusive practices that affect wholesale energy markets. They also participate in detecting and investigating market manipulation practices. CREG (Algeria) prevents others from dominating the management of the system operator and market operator. SERC (Bosnia and Herzegovina) monitors the trading activities in the wholesale electricity market to detect trading based on inside information and market manipulation, but it cannot regulate, impose or implement the penalties for these. SERC's jurisdiction over the wholesale market regarding investigatory and enforcement powers is limited by the primary legislation. Instead, SERC informs and cooperates with the relevant institutions of Bosnia and Herzegovina (such as a competition authority) to prevent and penalise prohibited actions. CERA (Cyprus) is the competent authority for the implementation of Regulation 1227/2011 for the integrity and transparency of the wholesale energy market.

In the case of EgyptERA (Egypt), the electricity market law defines the role of the NRA in wholesale electricity market monitoring, but the market has not opened yet, so such tasks have not been implemented.

NGA (Israel) monitors the prices and agreements related to natural gas. ARERA (Italy) reports any suspected infringements by companies operating in the electricity and gas sectors to the antitrust and competition authority. REGAGEN (Montenegro) has a role in market monitoring to a certain degree; it supervises and analyses the operation, business activities and market actions of energy undertakings with respect to the application of market rules. It also monitors the degree and effectiveness of the market opening and competition on the retail and wholesale levels, including electricity markets. This includes the prices for households (subscription, rate of change of supplier, rate of disconnection, provision of ancillary maintenance services per approved prices and complaints of household customers) as well as other violations or limitations of competition (the provision of respective information and referring of specific cases to the authorities competent for competition). However, REMIT has not been transposed yet into the national legislation, and the NRA does not have the power to investigate and enforce market abuse prohibitions or impose sanctions for market manipulation practices.

4.3.4 Tariff setting

Almost all NRAs are involved in the tariff setting process. Their responsibilities include approving the methodologies and values proposed by the regulated entities, autonomously setting and fixing methodologies and tariffs for the transmission and distribution networks, approving the methodologies for the provision of balancing and ancillary services and facilitating access to cross-border infrastructures. An overview of the NRAs' competences related to tariff setting is provided in Figure 13.

The NRAs' tariff setting powers may extend further than electricity- or gas-regulated infrastructure (i.e. transmission, distribution, storage, regulated LNG terminals, gas storages under regulated access). For instance, HERA (Croatia) also sets the tariffs for public service gas supply and SoLR supply for all public service gas suppliers in Croatia. It determines the elements and criteria for calculating the price of non-standard services. Moreover, it sets the amount and collection method of the fees for organising the gas market. CRE (France) also sets the method for calculating the production costs

of historical nuclear electricity production and the rules for calculating and adjusting suppliers' regulated access rights to historical nuclear electricity. PUA (Israel) determines the generation tariff for the monopoly company.

Most NRAs publish the data and methodologies used in the context of their ex-ante approval process to demonstrate the rationale behind their provisions. The same applies for setting connection fees. About 90% of the NRAs are granted this power.

Almost all NRAs have the power to require TSOs and DSOs to modify terms and conditions, tariffs, rules, mechanisms and methodologies to ensure they are cost reflective and applied in a non-discriminatory manner. A modification from the 2017 edition of the Regulatory Outlook relates to CMNC (Spain). The Royal Decree-Law 1/2019 enlarged the competences of CNMC and granted it the power to approve the methodology and tariffs for transmission and distribution. Most NRAs also have the power to include performance-based components in the tariff methodologies, but only 50% can penalise a non-performing undertaking via a reduced rate of return over the tariffs.

When evaluating the NRAs' power in tariff setting, it is important to analyse if, in practice, they have ever encountered any issues during the tariff setting process. Most of them responded that no issues have emerged in general, but a few reported problems related to the misconduct of operators in reporting information or lack of data reliability (CREG, Algeria; PUA, Israel; ERSE,

Portugal; EMRA, Turkey), difficulties related to the technical complexity of the process (ERSE, Portugal) or cases appealed to the court (RAE, Greece).

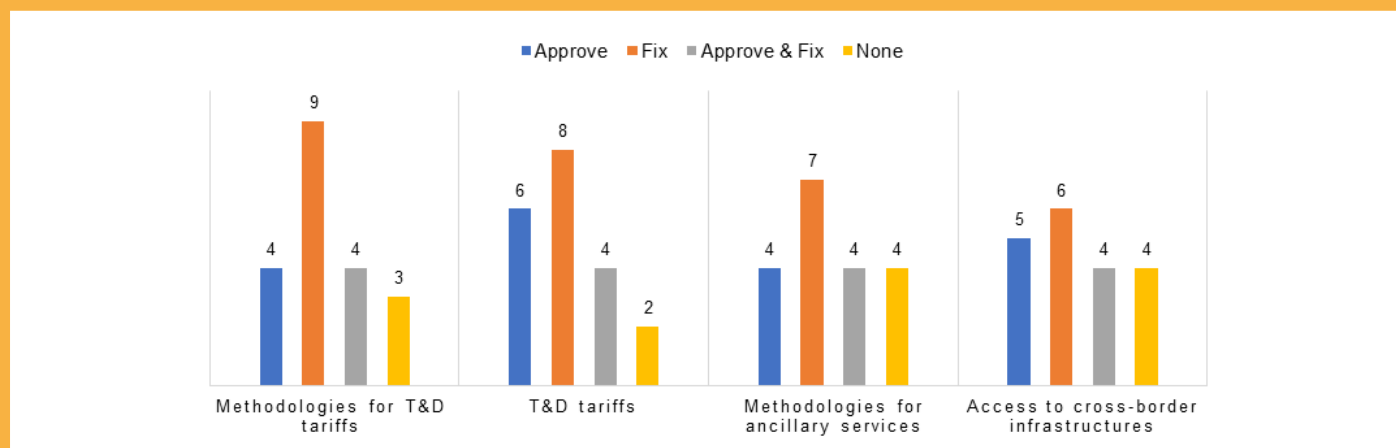
Finally, it can be noted that the level of competence in tariff setting is satisfactory among the NRAs, though some have room for improvement.

4.3.5 Licensing

A licensing regime is not in place in France and Slovenia. In other countries, such as Italy, Portugal, Spain and Morocco, licensing does not involve energy regulators, and the licensing process is generally handled by the ministries. ARERA (Italy) may address observations and recommendations to the government and parliament (regarding licenses or authorisations) and to the Ministry of Economic Development (regarding licensing, convention and authorisation schemes and any changes to or renewal of the existing schemes). Meanwhile, ANRE (Morocco) can issue an opinion on the applications for new RES power plants and direct transmission lines. In Tunisia, the Ministry of Energy participates in the Commission Supérieure de la Production Indépendante d'électricité, which is responsible for the licensing regime.

The NRAs that do manage the licensing can have several powers, depending on the legislation in place. This includes (i) issuing licenses, (ii) determining the terms and conditions of licenses, (iii) reviewing and monitoring licenses and their compliance with the terms and conditions, (iv)

Figure 13. The NRAs' responsibilities concerning tariff setting in MEDREG countries



modifying licenses, (v) imposing a fine on licenses for infractions and (vi) reporting violations of the terms and conditions. However, as seen in Figure 14, the NRAs are not always responsible for all stages of the licensing process.

In case of infractions concerning the terms and conditions of the licenses, around 50% of the NRAs have the obligation to refer them to another public body, usually the competent ministry, competition authority or TSO. On the other hand, 15 NRAs have the power to impose fines or sanctions.

Only 10 NRAs answered with regard to the average time needed to deliver a license (Figure 15). The average times reported ranged from one to two months from the date of application. These times may increase depending on the complexity of the license requested or the nature of the application (whether it is completed correctly without missing documents or other necessary information).

4.3.6 Dispute settlement

Almost all NRAs have a role in solving disputes. ERE (Albania) acts as a dispute settlement authority regarding the complaints submitted by the customers towards the licensees and the disputes raised between licensees in compliance with the respective rules and procedures. In Algeria, this role may be played by an arbitration chamber, and in Morocco, the law provides for a dispute settlement committee to operate as a separate body within the regulator. Regarding the parties involved in a dispute, as reported in Figure 16, the majority involves claims and disputes between operators and between operators and consumers.

Among the NRAs involved in dispute settlement between operators and consumers, ANRE (Morocco) is involved only in disputes on network use; otherwise, the law provides for a nominated person within suppliers to decide on such cases.

Figure 14 . The NRAs' competences regarding the licensing regime

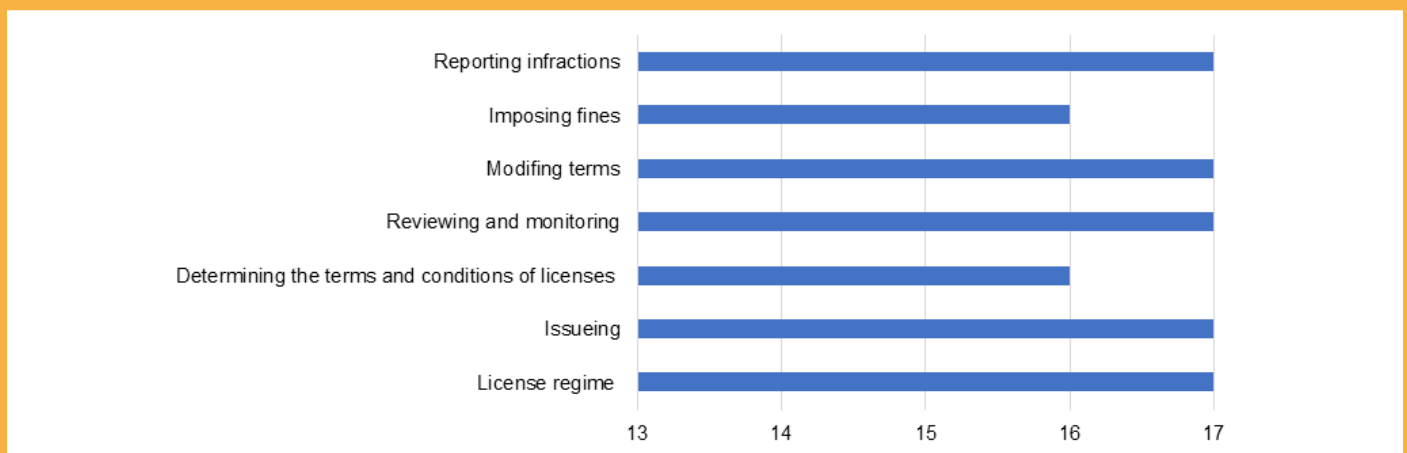
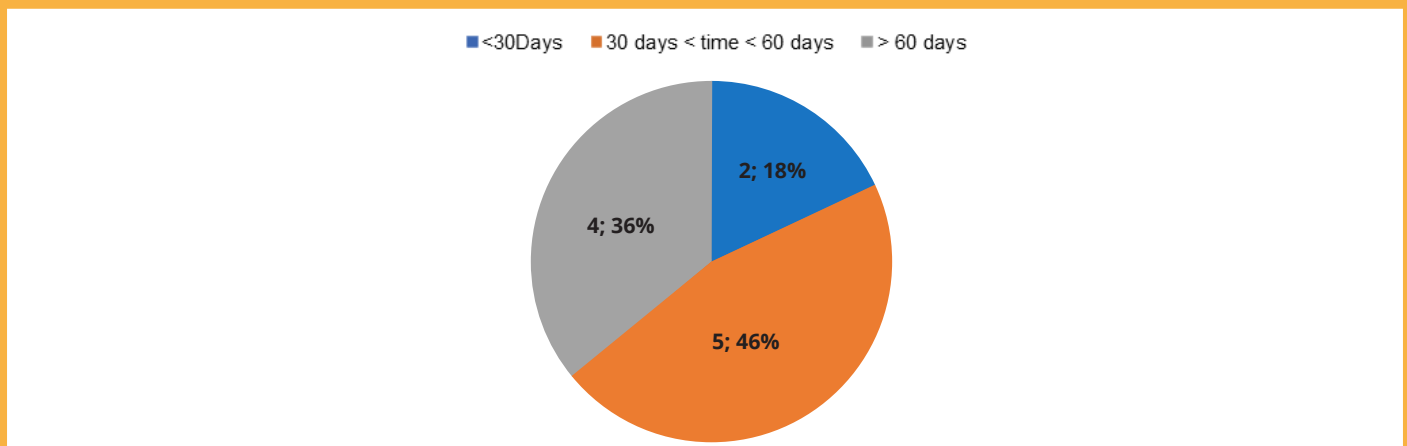


Figure 15 . Average time needed to deliver a license



When it comes to disputes between operators, CERA (Cyprus) is responsible for resolving disputes between licensed participants and issues concerning the terms of connection to the transmission and distribution networks. CRE (France) has a standing committee for disputes and sanctions (CoRDIS) 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 liquid natural gas (LNG) facility users and (iii) operators and carbon dioxide transmission and geological storage facility users. EgyptERA's (Egypt) role is to solve disputes through mediation. In case of CREG (Algeria), the dispute settlement for both cases is ensured by an arbitrary chamber; the composition of this chamber is established by law.

In almost all NRAs, the interested parties may register complaints against a TSO or DSO on issues related to non-discrimination, effective

competition, the efficient functioning of the market, transmission and distribution tariffs and the provision of balancing services. CRE (France) does not have the power to act as an arbitration authority and can be involved only during conflicts between the entities listed in the French Code.

The topics addressed by the NRAs in the context of dispute settlements are summarised in Figure 17. Grid access, third party access (TPA) and cross-border disputes are the main topics raised. Other topics include issues related to consumer rights, such as unfair commercial conducts, errors in billing, undue disconnections and switching, or issues related to license holders' responsibilities.

4.3.7 Unbundling

All Mediterranean NRAs have a role with respect to utility unbundling, with the sole exception of Tunisia, where there is no regulator and no legal

Figure 16 . The NRAs' competences in dispute settlement

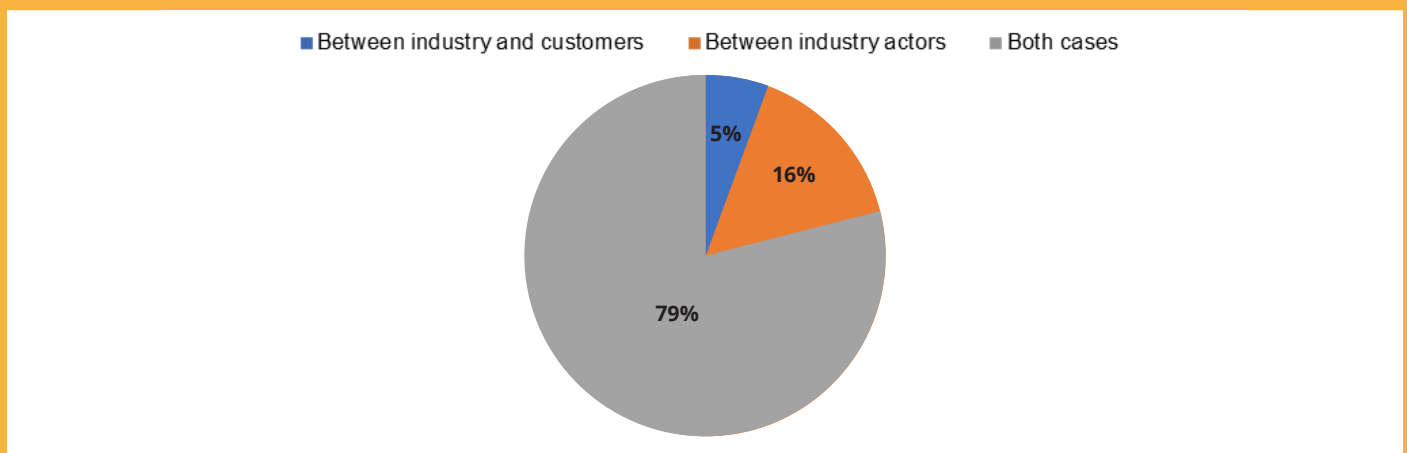
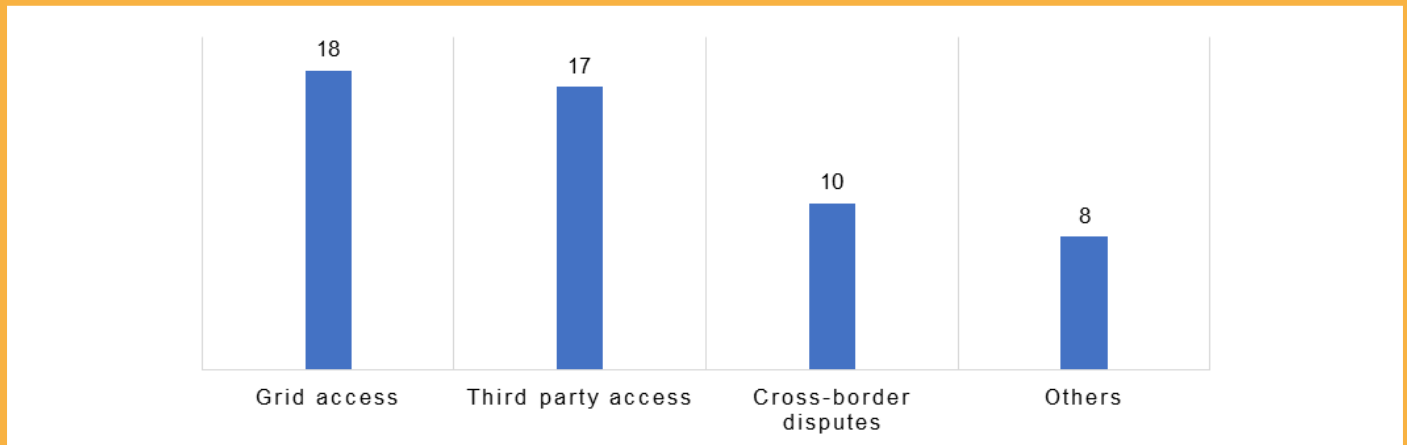


Figure 17 . The main topics settled by the NRAs



obligation for the unbundling of the vertically integrated incumbent. As a general rule, the NRAs are mandated to issue guidelines and a set of rules for accounting unbundling, compliance, reporting and cost allocation (Figure 18).

Accounting unbundling of the vertically integrated former incumbent is complete in EU member states. MEDREG members that happen to be member states and participated in the survey reported that accounting unbundling is carried out according to the relevant guidelines. NGA (Israel) noted that these guidelines are not necessary as accounting unbundling has already been achieved. In relation to such guidelines, ERE (Albania) has also established and adopted a uniform and standardised system of accounts for all licensees engaged in the electricity sector; this system is based on the relevant legislation and internationally accepted accounting standards. ANRE (Morocco) approves rules for the unbundling of the accounts of the vertically integrated incumbent.

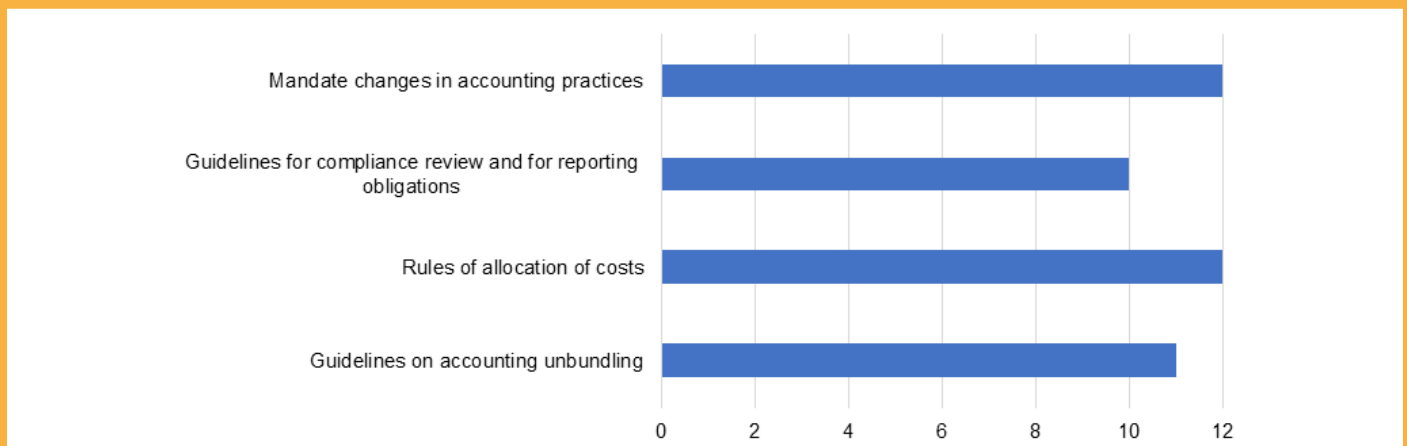
HERA (Croatia) and ARERA (Italy) have established rules for allocating the costs resulting from the unbundling process with the following aims: (i) achieving transparency and standardisation in the annual accounts of companies operating in the regulated sectors, (ii) monitoring the costs of individual services and (iii) ensuring that electricity and gas costs can be properly disaggregated and broken down by function to enable the effective promotion of competition and efficiency.

On drawing up guidelines for compliance review and for reporting obligations regarding the unbundling process, CRE (France) publishes a report every two years on the compliance of system operators with the codes of conduct and independence. REWS (Malta) does it on the license conditions. Meanwhile, ERSE (Portugal) does not carry out such tasks as the law and regulatory codes prescribe the unbundling rules it monitors. Concerning the imposition of changes in accounting practices, there is no specific mandate in Malta for when REWS determines that the sector participants are not sufficiently unbundled. However, REWS is obliged to take all necessary actions for the undertakings to comply with the unbundling requirements. In Portugal, ERSE must prevent cross-subsidisation between different activities. It can refuse to accept costs that represent detected cross-subsidisation according to the applicable rules.

4.3.8 Technical competences

Figure 19 summarises a set of additional NRA competences regarding the regulation of the energy sector; these also include the specific technical competences defined in Section 3.3.8. The majority of the NRAs are involved in setting or approving standards related to the quality of supply (17 out of 22) and congestion management rules/standards (16 out of 22). Fifteen NRAs are involved in issuing market rules and grid codes, addressing congestion, defining metering rules and charges and setting incentive regulation.

Figure 18. The main role of NRA in utility unbundling



In the case of violations of service standards, most NRAs have the power to sanction or intervene. For instance, according to the legal framework, CERA (Cyprus) may impose effective, proportionate and dissuasive sanctions on electricity undertakings that fail to comply with their obligations under the law or any relevant, legally binding regulatory decision. It can also approach a court to impose the sanctions. CRE (France) has defined that each quality indicator is subject to a financial incentive as a reference objective; below it, the operator will pay a penalty, and above it, they will receive a bonus. ARERA (Italy) sets automatic refund mechanisms for users and consumers for when the standards are not met. It monitors the conditions under which the services are provided and has the power to demand documentation and data, carry out inspections, obtain access to plants and apply sanctions. It can also determine when the operators are required to provide refunds to the users and consumers. REGAGEN (Montenegro) sets rules on minimum quality standards for electricity delivery and supply with thresholds for standard services, and the energy utilities are obliged to pay financial compensation for breaching these target values. Regarding exemptions for TPA, CREG (Algeria) has consultative powers to the ministry that develops all the regulations and approves the procedures for operators; the ministry decides on granting the exemptions based on CREG's opinion.

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

development and planning, NRAs have differentiated roles in investment planning and cost recovery, both nationally and regionally. This is likely because many of these tasks are carried out in cooperation with the relevant ministries and national governments depending on the legislative framework in place in each country. An overview is provided in Figure 20.

4.3.9 Consumer protection

With the exception of ANRE (Morocco), whose competences do not cover consumer protection, all Mediterranean NRAs are responsible for customer protection in their regulated sectors. However, the level of responsibility differs from country to country. Overall, as shown in Figure 21, consumer protection is ensured by competences related to information on consumer rights, management of costumers' complaints and tools for checking or monitoring energy prices.

CRE (France) has created and utilises a 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.

Consumer support is also expressed by the commercial quality delivered by the distributors, and almost all NRAs have the power to monitor the time taken by the sector participants to make connections and repairs, as shown in Figure 22.

Figure 19. The NRAs' technical competences

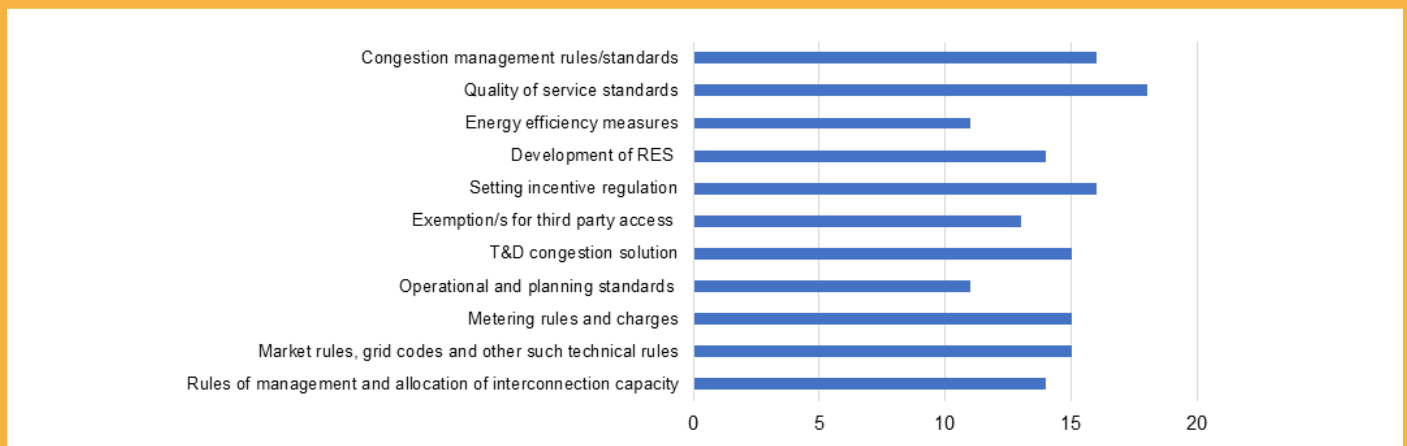


Figure 20. Powers regarding infrastructure planning and cost recovery

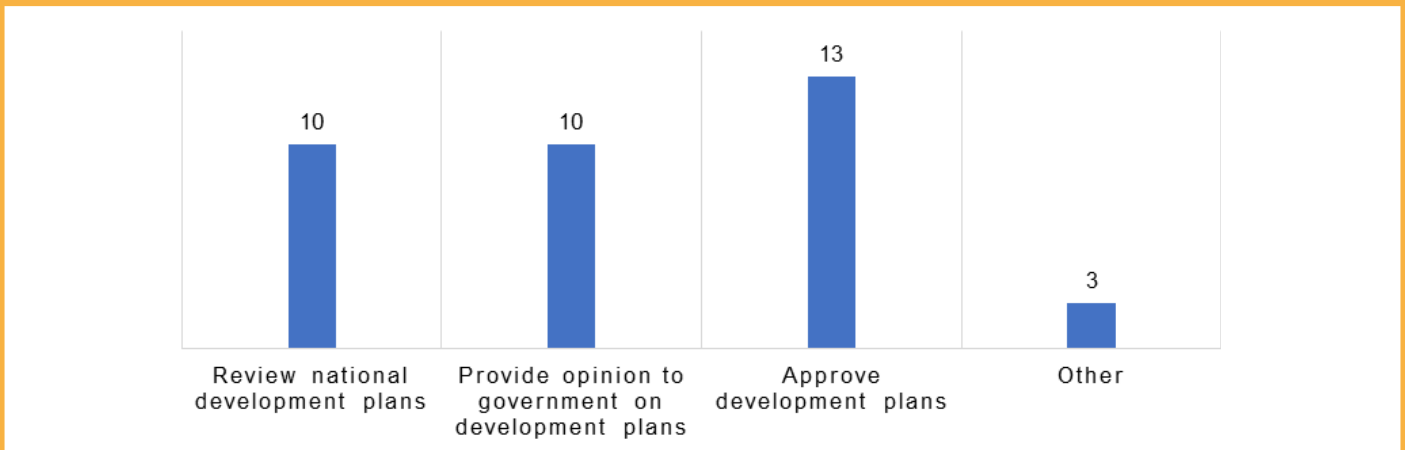


Figure 21. The NRAs' competences for supporting energy consumers

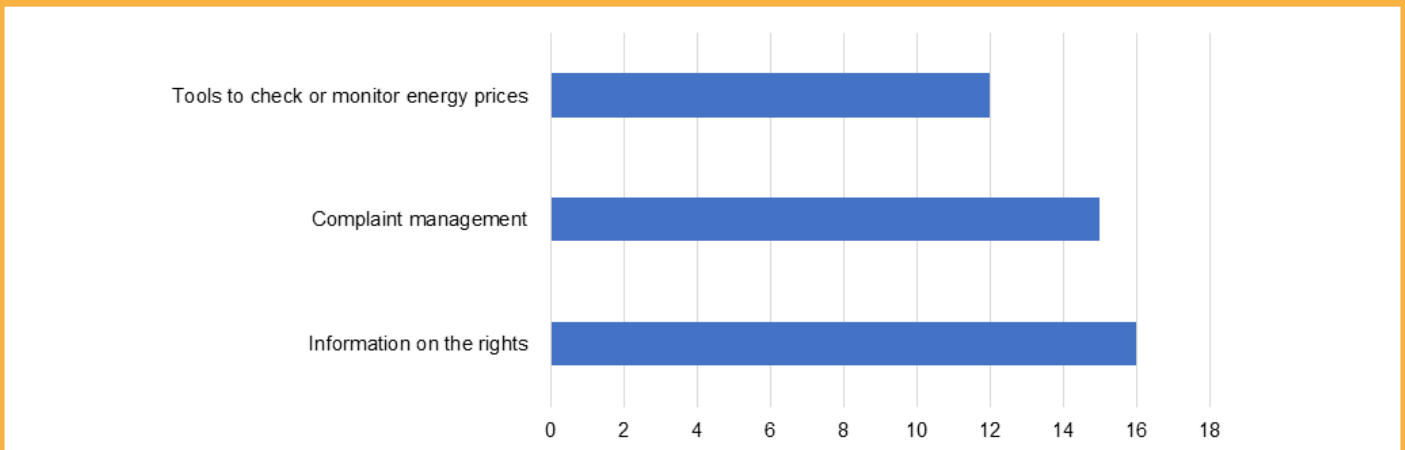
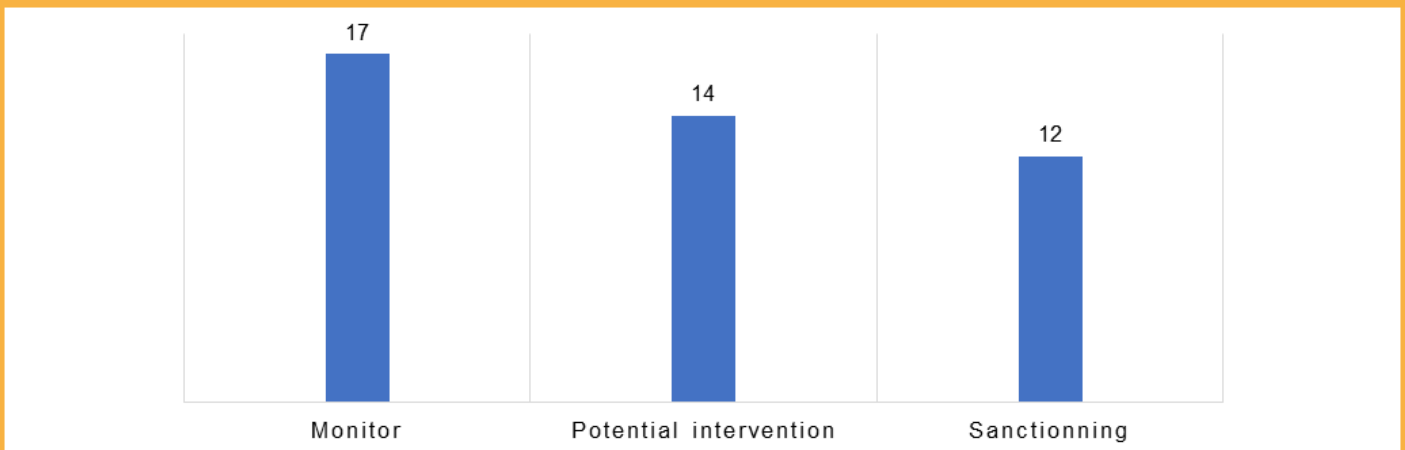


Figure 22. Average time needed to deliver a license



For instance, CERA (Cyprus) has issued regulations that include the obligations of the supplier and/or owner of the distribution system, consumer rights, performance standards and minimum performance levels. They also cover the fines imposed in case the supplier and/or owner fails to comply with these regulations. Most NRAs also have the power to intervene if too much time is taken. For instance, RAE (Greece) has the power to demand justification for the reasons that caused the delay; it has also approved a program of commitment of the DSO 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. However, only half of the NRAs may intervene and impose sanctions if excessive time is taken by the sector participants to make connections and repairs.

When it comes to vulnerable consumers, only 56% of the NRAs are directly involved in addressing their needs. The rest do not intervene at all as it is an issue mainly dealt with by ministries (Figure 23).

For addressing vulnerable customers' needs, five NRAs just implement government policies, whereas another five NRAs define the policies. Four NRAs set the prices for vulnerable customers (Figure 24).

Finally, in most countries, there are other bodies with the power to address the needs of vulnerable consumers – ministries, consumer protection agencies, ombudsman or antitrust authorities.

4.4 Internal organisation

Most NRAs have the power to determine their internal organisation. However, for some, at

Figure 23 . The NRAs in charge of competences for vulnerable consumers

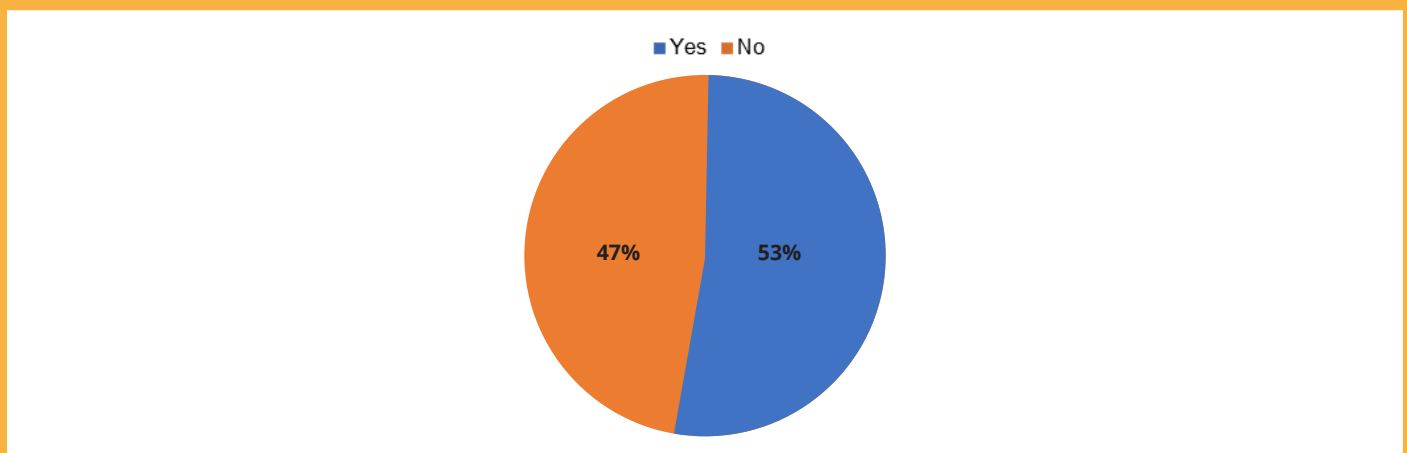
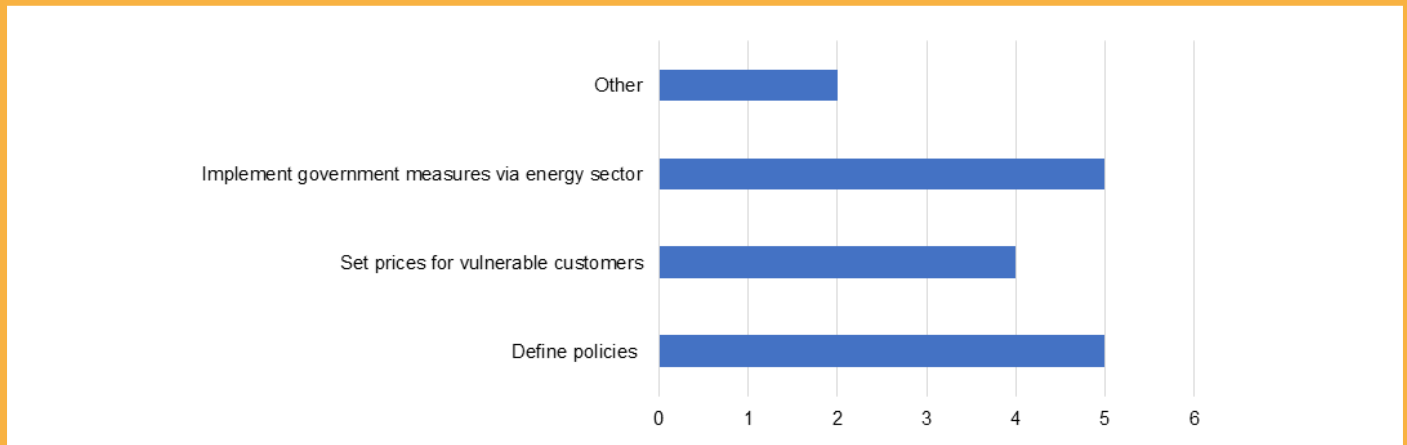


Figure 24 . The measures applied by NRAs for addressing vulnerable consumers' needs



least the high-level organisation is provided by law. For example, in EMRA (Turkey), the law defines the names and competences of the NRA's departments, and the NRA is then tasked with their internal organisation. NGA (Israel) defines its organisation in cooperation with the Ministry of Energy. Only CNMC (Spain) cannot set up its internal structure.

Most NRAs have the power to autonomously decide on their HR policy, including hiring and firing staff as well as staff allocation and composition; the exceptions are CNMC (Spain) and NGA (Israel), which define their HR policies in cooperation with the Ministry of Energy. Moreover, 15 NRAs utilise specific criteria for hiring staff members, which include setting central exams, the assessment of candidates by an independent selection panel, specific selection criteria and interviews for each position and the issuance of a public notice.

The regulatory board is the final decision-making authority for the selection and appointment of staff members in 12 NRAs. For instance, in Greece, the administrative and technical staff are selected by the Supreme Council for Civil Personnel Selection, while the policy officers are selected by the board of RAE (Greece). In ARERA (Italy), the board has the final say on the procedures carried out by the selection panel, and the recruitment is ultimately carried out by the head of HR. In PERC (Palestine), the board is the final decision-making authority for the selection of most staff, but the CEO makes the final decision regarding the board directors. In five other NRAs, the chairman or

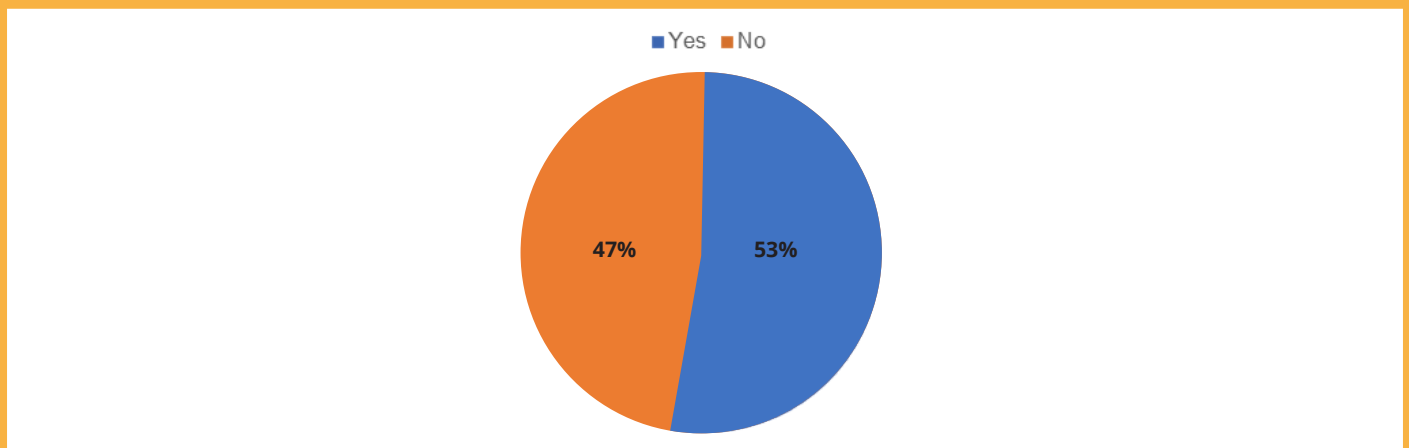
CEO is the final decision-making authority for HR selection. The remaining five NRAs did not specify the relevant body responsible for HR selection. Figure 25 provides an overview of the NRAs in which the regulatory board is the final decision-making authority for the selection and appointment of staff members.

In 10 out of the 22 NRAs, the regulatory board is also the final decision-making authority for removing and setting penalties and incentives for the staff, with possible limitations imposed by the state budget. In the other NRAs, this is the responsibility of the chairman or director; it may also be governed by internal by-laws.

Regarding the status of the employees, the staff status of 15 NRAs is comparable with that of national civil servants; in other cases, the staff status may be governed by general labour regulations or specific rules applicable only to the NRAs. Moreover, a few NRAs can have only a percentage of the staff employed as civil servants, so external contractors may be hired for specific duties. In this regard, Figure 26 outlines the percentage of NRAs in which the terms and conditions of the employees are like those of national civil servants.

The strong relation between the NRAs and public governmental bodies is also clear from the determination of the salaries of the board members. In 14 NRAs, the salaries are established according to the relevant level of civil servants. The board members' remuneration may be decided by internal regulations in HERA

Figure 25. The NRAs in which the regulatory board is the final decision-making authority for the selection and appointment of staff members



(Croatia), CRE (France) and PERC (Palestine) or by the decree of the Council of Ministers in CERA (Cyprus) and GasReg (Egypt). The salaries of the board members in ERSE (Portugal) are determined by a remuneration committee whose composition, competences and operation are governed by law. The Framework Law on Independent Administrative Entities in Portugal sets a maximum salary for the board members of regulatory bodies. Furthermore, the board salary is linked (i.e. it cannot be inferior to) to the highest senior management position in the regulatory body. The same applies for the remuneration of staff members, though other criteria – such as professional experience, internal regulations of the NRA, the salary scale set by the board of directors or collective agreements – may be also considered.

In some NRAs, the employees’ salaries are lower than those of industry personnel in the energy sector (CRE, France; RAE, Greece; ARERA, Italy; REGAGEN, Montenegro), while in others, the employees’ salaries are higher than those of civil servants (CRE, France and ARERA, Italy). In EMRC (Jordan), the salaries are lower in comparison to both industry personnel and civil servants. In most NRAs, there is no legal restriction on the number of staff members as most of them can autonomously determine the number of employees needed. However, in a few countries, the number of NRA employees is established by law, subject to ministerial or government approval or defined by external bodies (CRE, France; PUA, Israel; ARERA, Italy; ERSE, Portugal; CNMC, Spain;

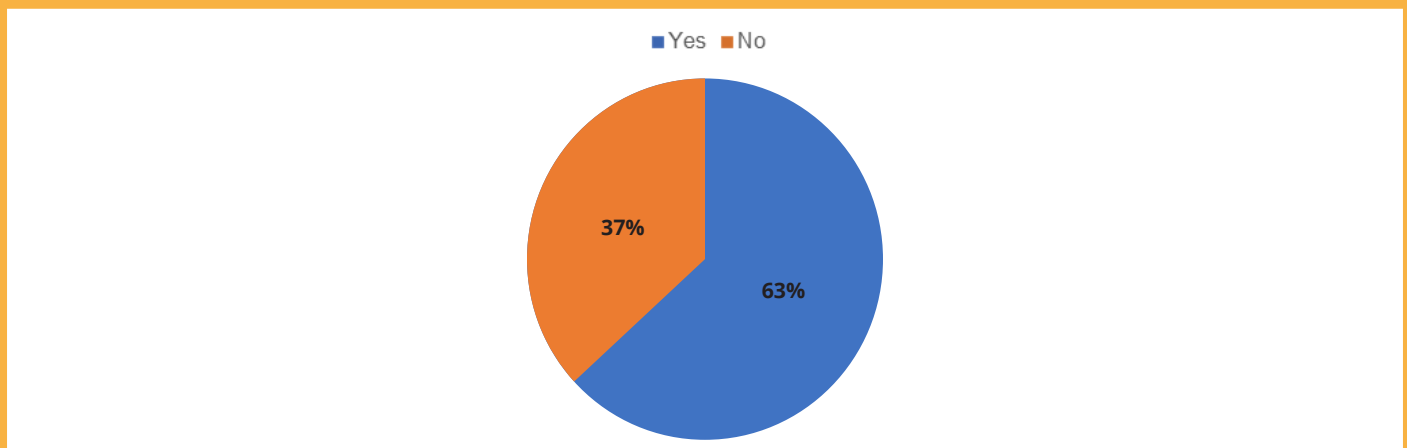
EMRA, Turkey). The number of staff members varies between Mediterranean NRAs, with the largest one having more than 500 employees and the smallest one having 15 employees. An overview of the number of employees in the NRAs is given in Figure 27.

In 16 NRAs, there is a binding code of ethics that the staff must follow, and 15 of them have a sufficient budget to fulfil its mission as established by law. The NRAs’ budgets vary greatly from country to country, with the minimum being less than one million euros and the maximum being almost 77 million euros; the average is 16.2 million euros. On average, 52% of the NRAs’ budgets is dedicated to staff remuneration. Once again, a notable spread is identified, with 16–80% of the budget dedicated to salaries.

4.5 Enforcement

An overwhelming majority of the NRAs (17 out of 22) have the power to sanction sector participants when necessary. Only REGAGEN (Montenegro), CREG (Algeria) and Tunisia do not have such power, while PERC (Palestine) provides recommendations to the Palestinian Energy and Natural Resources Authority (PENRA) regarding the sector operators to be sanctioned. In the case of ANRE (Morocco), which is in the establishment phase, the law foresees that it is authorised to conduct on-the-spot checks to ensure that the regulated entities comply with the laws and regulations applicable to their activities. However, more specific enforcing powers have not been defined so far. Meanwhile,

Figure 26. The NRAs in which the terms and conditions of the employees are similar to those of national civil servants



13 NRAs have the power to expose non-compliant operators, publishing comparative reports in case of demonstrated insufficient performances. In EMRA (Turkey), the non-compliance of operators and related information can be found either in the annual or monthly reports. No ad-hoc reports are issued.

When violations occur, most NRAs cannot revise tariffs or reduce rates of return on non-compliant operators. Such an option is only available to eight NRAs. However, several other enforcement mechanisms are in place to sanction market operators. The most used are the following:

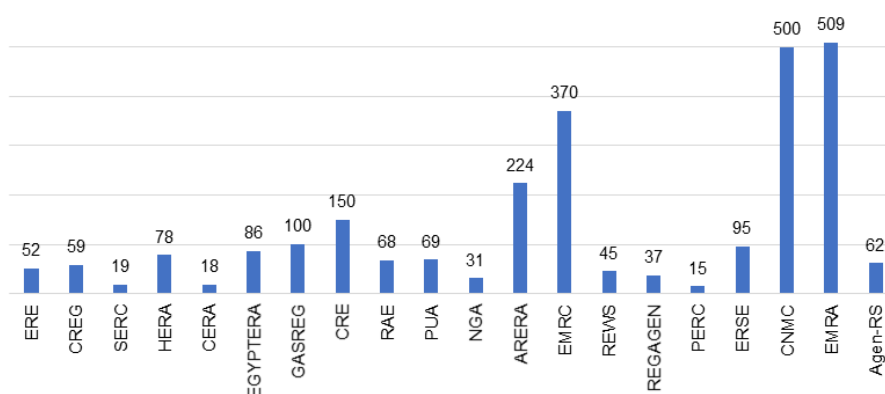
- suspension of professional activities: ERE (Albania), SERC (Bosnia Herzegovina), EgyptERA and GasReg (Egypt), CRE (France), RAE (Greece), REWS (Malta), ERSE (Portugal) and EMRA (Turkey).
- temporary prohibition of network access: CRE (France) and EMRA (Turkey).
- financial penalties, sanctions and compensations: CREG (Algeria), HERA (Croatia), CRE (France), RAE (Greece), ARERA (Italy), EMRC (Jordan), REWS (Malta), REGAGEN (Montenegro), ERSE (Portugal), AGEN-RS (Slovenia) and EMRA (Turkey).
- revocation or suspension of license: CERA (Cyprus), REWS (Malta) and EMRA (Turkey).
- commitments for future compliance: HERA (Croatia) and ARERA (Italy).

Enforcement is also ensured by the voting procedure in an NRA's board, which is fundamental for avoiding deadlock in regulatory board decisions. In general, the majority of NRAs foresee procedures for ensuring that the decision-making process is effective. Examples of this include having an odd number of commissioners with a majority vote where abstention is not possible, the chairman casting a preponderant or veto vote in case of a tie vote or bringing a case before an arbitrator appointed by the board members.

4.6 Transparency and accountability

Almost all MEDREG NRAs publish information on their functioning (missions, duties, organisation chart and reports) and make it available to external stakeholders via websites or reports. However, ANRE (Morocco) still does not have a website. The information related to NGA (Israel) is included in the website of the Israeli Ministry of Energy. The Ministry of Energy (MEMRE, Tunisia) includes only partial information and is also largely outdated. The information published usually includes all the main decisions of an NRA (while protecting commercially sensitive information), with the exceptions being ANRE (Morocco), MEMRE (Tunisia) and EMRA (Turkey). In the case of ANRE, the law establishes the publication of an official bulletin that contains information related to the tariffs for the use of the national electricity grid and medium-voltage power grids, the opinions of the Dispute Settlement Commission and the annual activity report. Furthermore, information on regulatory practices – such as licensing, tariffs

Figure 27. The number of staff members in the NRAs



and market monitoring data – is usually available on the websites of almost all Mediterranean NRAs. However, not all of this information is available in English, and some NRAs still do not have English versions of their websites.

Except for CREG (Algeria)⁴, Mediterranean NRAs consult stakeholders on draft regulations before making any final decision. The scope of the regulatory issues placed under consultation vary from country to country, but the use of consultation is present in all countries. Clearly, consultation is a valuable tool that facilitates evidence-based regulation and fruitful stakeholder engagement. As reported in Figure 28, the consultation process is applied through several modalities, with a clear preference towards public hearing and written consultation.

Finally, accountability processes are investigated as NRAs are public bodies that may be invited to discuss their main activities and results and provide information on how they have fulfilled their mission. In this regard, the main instrument used by all Mediterranean NRAs is the issuance of an annual report; it details all their activities and regulatory operations, giving external stakeholders a chance to learn about and evaluate the NRAs' work.

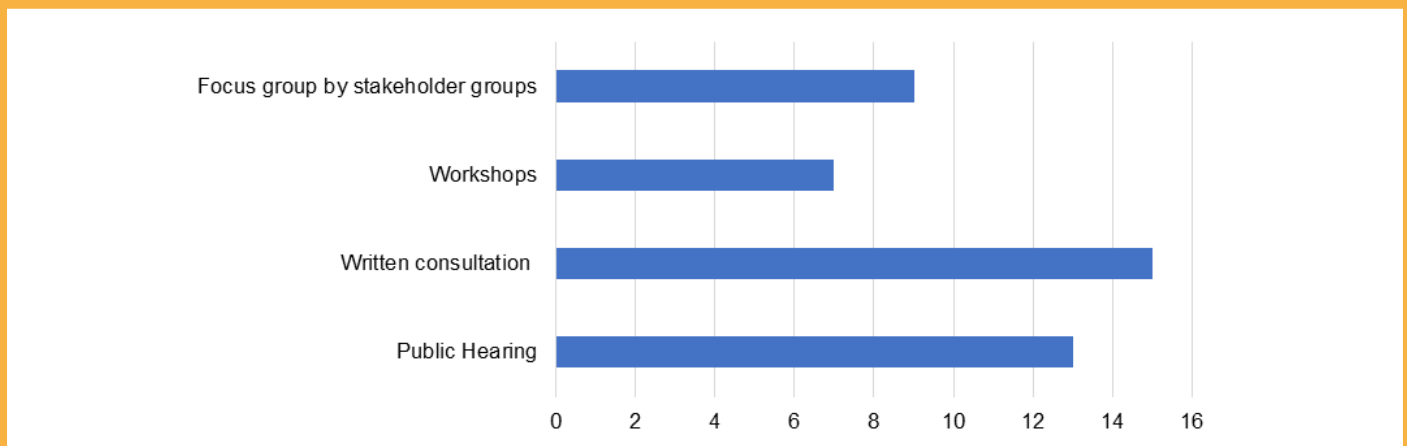
All NRAs have reporting obligations to other public bodies, such as the government, competent ministry or parliament. Depending on the national

⁴ However, most of the decisions are made in collaboration with the concerned stakeholders.

legislation, some NRAs are also required to appear annually before a parliamentary committee or other government body to ensure their compliance with the reporting procedure. With the exception of PERC (Palestine), the information reported by all other NRAs are subject to rules that protect confidential information.

Finally, two additional elements are to be considered when evaluating an NRA's accountability. The first one involves the voting procedures of the regulatory board; these are defined in each NRA and usually foresee quorum and majority or unanimity as the voting criteria. The second is related to the existence of a communication strategy (e.g., use of a press office, press releases, etc.) that is available to most Mediterranean NRAs.

Figure 28. The consultation tools used by the NRAs



5

NATIONAL ENERGY REGULATORY FRAMEWORKS

5

NATIONAL ENERGY REGULATORY FRAMEWORKS

5.1 ERE (Albania)

5.1.1 Legal status

The Albanian Energy Regulator Authority (ERE) is the regulatory institution for the electricity and natural gas sectors in Albania. ERE was established in 1995 under Law No. 7970, dated 20.07.1995 (“On power sector regulation”) and under Law No. 7963, dated 17.07.1995 (“On electricity sector”). ERE operates based on Law No. 43/2015, dated 30.04.2015 (“For power sector”) and Law No. 102/2015, dated 23.09.2015 (“For natural gas sector”). ERE is a legal and public entity that is legally and functionally independent from all other public and private entities. ERE cooperates with the Ministry for Energy and Energy Infrastructures and other government institutions on issues related to the aforementioned laws. Before the March 31 of each year, ERE must submit an annual report to the Parliament of Albania on the situation of the energy sector as well as ERE’s activities in the previous year.

5.1.2 Independence

a. Political and legal independence

ERE is led by a board, which is composed of its chairperson and four members. The chairperson and the board members are appointed by the parliament based on a proposal from a selection team. This team is composed of two representatives from the Parliament of Albania – the chair of the responsible parliamentary commission on energy and the chair of the responsible parliamentary commission on economy – and from the ministry responsible for energy. When selecting the chairperson and board members as well as the staff, there is a public call for the candidates. For the chairperson and board members, no later than three months before the termination of terms

of the current chairperson or a board member, the parliament publishes a notification on the vacancy. The selecting team should pre-qualify two candidates that fulfil the requirements and propose these candidates to the parliament. The chairperson and board members must be people who meet the following requirements:

- The chairperson should be a high-calibre expert in the energy field. They should have at least 15 years of experience working in the energy sector.
- One of the board members should have 10 or more years of experience working as an electrical engineer in the power sector.
- One of the board members should have 10 or more years of experience working as an engineer in oil and/or gas in the hydrocarbons sector.
- Two other board members should have a legal or financial professional background with 10 or more years of experience, out of which five or more should be in the energy sector.

The chairperson and board members are appointed for a term of five years with the right to be re-appointed for another mandate. There are formal rules that prohibit the regulatory authorities (i.e. board members and staff) from having interests or holding shares in the regulated utilities or being political leaders. As defined by Article 15 of Law No. 43/2015 (“On power sector”), the chairperson, board members and technical staff of ERE have the following limitations:

- They cannot be the owner, shareholder or holder of assets, or any part thereof, of a licensee holding a license under the terms and conditions of this law.

- They cannot be an employee or a subcontractor of a licensee holding a license under the terms and conditions of this law.
- They cannot be a member of the supervisory board or other relevant governing bodies of a licensee active in the power sector in Albania.
- They cannot be a director, administrator or be in any other management position in a licensee holding a license under the terms and conditions of this law.

Such violations are regulated under Articles 46, 47 and 57 of Law No. 9376, dated 7.4.2005 (“On the prevention of conflict of interest in exercising the public functions”) and Law No. 152/2013, dated 30.05.2013 (“On civil servants”).

The chairperson and board members may be dismissed from the parliament if they do not comply with the principle of independence, exhibit any conflict of interest or are convicted of a criminal offence by a final court decision.

The parliament must release the chairperson and board members from their duty if they resign or run in either the member of parliament elections or local elections. They will also be released if they are unable to fulfil their duties and responsibilities for a term over six months or are absent from the workplace, without cause, for more than one month. So far, ERE has experienced three chairman resignations – in 2006, 2011 and 2013. The board defines ERE’s organisation, the number

of employees, their salaries and the financial treatment of the chairperson, board members and technical staff. As a basis for the salary and financial or non-financial treatment specifications of the technical staff, the board takes into consideration the market conditions and salary levels in the controlled companies in the covered areas⁵.

The table below summarises the formal obligations of ERE vis-à-vis the government and the parliament.

b. Financial independence

Based on Law No. 7970, dated 20.07.1995, it was foreseen that ERE would operate based on a government grant that had to be returned within three years after the establishment of ERE. After the first grant, ERE’s budget has been financed by its own resources, the regulatory fees and the license application fees. ERE’s budget is approved by the board, and ERE has full autonomy in the

⁵ Law No. 43/2015 of 30.04.2015 (“On power sector”) in Albania, in its Article 11(7), and Law No. 102/2015 of 23.09.2015 (“On natural gas sector”) in Albania, in its Articles 13–21, regulate the activity of the Albanian power regulator (ERE). These laws stipulate that the board of commissioners of ERE decides on ERE’s organisational chart, number of employees and their salaries. However, in order to enforce these provisions, it is necessary to amend Law No. 152/2013 of 30.05.2013 (“On civil servants”) and Law No. 9584 of 17.07.2006 (“On the payments, salaries and the structures of constitutionally independent institutions and other independent institutions established by law”). These amendments should grant the ERE board more flexibility in fixing salaries beyond the usual civil servant salary levels. However, these two laws have not been amended yet.

Table 3 . ERE’s formal obligations for approval

Obligations	Government	Parliament
Opinions on issues of supply security	X	
Opinions on national development plans	X	
Annual activities report		X

implementation of its budget. ERE determines and approves a regulatory fee to be paid by the licensees in accordance with the prevalent regulation. This fee should be proportionate to the annual income generated by the activity performed by the licensee. The auditing of ERE's financial activity should be carried out by chartered accountants in compliance with the legislation in force.

c. Functional independence

All ERE board decisions are subject to appeal in the administrative court and appeals tribunal within 30 calendar days, starting from the date when the decision is published in the "Official Journal".

5.1.3 Competences

a. Access to information

Based on the law, ERE can demand any financial or technical information from the licensees while performing its tasks.

b. Security and quality of supply

The TSO and DSO should develop specific rules that contain the minimum requirements for grid security and operation, including rules on the quality of supply and grid security performance. While developing these rules and requirements, the TSO and DSO should consult the relevant stakeholders in and outside the country. The rules on the quality of supply and the security of network performance must be approved and monitored by ERE. Furthermore, ERE is responsible for monitoring the measures for managing the peak demand and the interruptions in electricity supply. If needed, it must also take the appropriate measures to increase the supply security.

ERE should supervise the maintenance of an appropriate level of technical capacity reserve of the transmission from the TSO, which also cooperates with the operators of the interconnected transmission systems of neighbouring countries for ensuring grid operation security. ERE approves investment plans and monitors them while regarding the new interconnection lines constructed by the TSO or private investors; these should be approved in accordance with the decision of the Council of Ministers, following the

proposal of the responsible energy minister. The conditions and procedures for the construction of the new interconnection lines should also be approved in accordance with the decision of the Council of Ministers.

c. Market opening and market monitoring

Based on the law, the electricity customers connected to the 110 kV voltage level and above as well as any other client, regardless of the voltage level, with an annual energy consumption over 50 million kWh will be considered to have emerged in the liberalised market. The customers connected to the 35 kV voltage level were obliged to participate in the liberalised market no later than June 30, 2016. Meanwhile, the customers connected to the 20 kV level were obliged to participate no later than December 31, 2016, and the customers connected to the 10 kV and 0.6 kV voltage levels were obliged to participate no later than December 31, 2017. The customers connected to the 0.4 kV voltage level have the right to freely choose their supplier. ERE has the right to monitor and control contract execution and the performance of services by the licensees; it can exercise the rights of inspection and access to documentation and information on licensees, provided they keep the received information confidential.

ERE is responsible for collecting information on market dominance as well as predatory and anti-competitive behaviour. It cooperates with the competition and antitrust authorities and has a role in prohibiting abusive practices that affect wholesale energy markets and in detecting and investigating market manipulation practices.

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 should ensure the appropriate short-term and long-term incentives for the TSO and DSO to increase efficiency, market integration, the security of supply and support of the related research activities. Moreover, ERE should ensure access to the cross-border infrastructure, including

the procedures of capacity allocation and the management of limited capacities.

The tariffs for grid access should be applicable on a non-discriminatory basis to all grid users and be transparent; they should reflect the need for grid security assurance as well as the real costs. Administrative offences should be sanctioned by ERE with fines from 0.1%–3% of the licensee's annual turnover for the previous year.

e. Licensing

Any legal person who exercises activity in the power and natural gas sectors must be equipped with a 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; and
- report or announce infractions for violations of the terms and conditions of the licenses.

ERE takes a decision on whether or not to grant a license on electricity generation within 60 days from the application date; for licenses other than those for generation, this timeframe is narrowed to 30 days. There may be an extension for the issuance of the license in accordance with the regulation for the organisation and functioning of ERE. However, this extension cannot exceed 30 days.

f. Dispute settlement

ERE acts as a dispute settlement authority, according to specific rules and procedures, for complaints filed by customers as well as disputes between or among the licensees. Specifically, ERE has the legal authority to

- Handle the customer complaints about to the licensees regarding the offered services;

- settle disagreements between the licensees regarding the exercised activity; and
- settle the disputes between the licensee and any customer or system user of the distribution/transmission system in the quality of the third party that requires access to the grid.

Any concerned party with a complaint against the TSO or DSO and any licensee regarding the implementation of their obligations under the definitions of this law or other by-laws in the 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. This can be extended for an additional 30 days in case ERE needs further information on the case.

g. Unbundling

Any licensee should, in their internal accounting, keep separate accounts for each of the exercised licensed activity and for any other activity not related to the energy sector. This is intended to avoid discrimination, cross-subsidisation and jeopardising the competition. These accounts may be presented as consolidated, apart from cases where the carried activities relate to energy distribution or transmission. Furthermore, under the law, ERE must approve the compliance program for the TSO and DSO. Based on the law, ERE should establish and adopt a uniform and standardised system of accounts for all licensees engaged in the power sector; this should be based on the effective legislation and internationally accepted accounting standards. ERE has the duty to (i) establish rules regarding the allocation costs resulting from the unbundling process, (ii) draw up guidelines for compliance review and (iii) report obligations regarding the unbundling process. Moreover, ERE has the power to mandate changes in accounting practices if it determines that the sector participants are not sufficiently unbundled.

h. Technical competences

ERE should exercise its activity in compliance with the effective legal framework.

Under the law, one of the objectives of ERE is the commitment to the development of a secured,

sustainable and non-discriminatory customer protection system. This should be in compliance with the objectives of the power system development and electricity efficiency as well as the integration of large-scale power generation from renewable sources.

More specifically, pursuant to Law No. 43/2015 (“On power sector”), ERE has the following power to

- approve the market rules of the power sector;
 - approve and publish, pursuant to the transparency principle, the transmission, distribution, universal service or other applicable public service tariffs and their methodologies;
 - approve and publish, pursuant to the transparency principle and considering the costs of the offered services, the tariffs for the following:
 - » connections and access to the national grid, including the tariffs for transmission and distribution;
 - » balancing services, which offer appropriate steam to the users of the grid for balancing the energy entering the grid and the energy consumed from the grid; and
 - » the licensee’s activities when the public wholesale obligation is defined;
 - ensure access to the cross-border infrastructure, including the procedures of capacity allocation and the management of limited capacities;
 - decide on the public service obligations to the licensee, including supplying universal service in accordance with Articles 47 and 85 of this law;
 - ensure unbundling and the other obligations of the TSO and DSO in compliance with the provisions of this law;
 - cooperate on cross-border issues with the regulatory authorities of the other countries
- concerned as well as with the Energy Community Regulatory Board (ECRB) for harmonising the regulatory framework for the development of the regional electricity market. This includes the cross-border exchanges of electricity and the rules regarding the management of interconnection capacities;
- take measures to avoid cross-subsidies between transmission, distribution and supply activities as well as between the categories of the clients;
 - ensure, alongside the other relevant authorities, the effective implementation of consumer protection measures, including those referred to in Articles 86, 96 and 88 of this law;
 - cooperate with the 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 harmonised format at national level for the consumption data prepared from a system operator;
 - publish the conditions for the quality of services offered by the system operators;
 - contribute to the compatibility of data exchange processes for the most important regional market data;
 - promote energy efficiency measures and demand management as well as improvements in the quality of service in the electric power sector;
 - publish quarterly reports related to the electricity market operation on its website; and
 - approve regulations on the following after a proposal from a licensee:
 - » the purchase and exchange of the procedures executed by all market participants exercising the functions of generator and supplier in charge of rendering the public service;

- » the security of the energy supply for covering the losses in the distribution and transmission grid.

i. Customer protection

One of ERE's tasks based on Law No. 43/2015 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 should determine – in cooperation with the ministries responsible for energy and finance and in consultation with ERE and its stakeholders – the criteria and procedures for obtaining the status of customers in need and their rights, which are approved by the decisions of the Council of Ministers. ERE does not have the power to address the needs of vulnerable consumers since vulnerability issues are addressed via social policy.

5.1.4 Internal organisation

In 2015, Albania succeeded in transposing the Third Energy Package in the electricity and gas sectors by approving the respective primary laws. Having transposed this package, Albania's laws about the electricity sector under Article 11/p.7 and Albania's law on the gas sector state that the energy regulator's authority board defines its organisational chart, the number of employees and their financial treatment. However, to ensure the full implementation of the Third Energy Package and to enforce these provisions, amendments are needed for Law No. 152/2013 ("On civil servants") and Law No. 9584 ("On the payments, salaries and the structures of constitutional independent structures and other independent institutions established by law").

The board defines ERE's organisation, the number of employees, their salaries and the financial treatment of the chairperson, board members and technical staff. The specific criteria used for hiring the staff members are based on the civil servant law. The terms and conditions for the employees are the same as those for civil servants. The employees' salaries are on a similar level as those of civil servants,

government officials and industry personnel in the energy sector.

ERE staff consists of 52 members. Its annual budget is 2.425.604,64 euros; 50% of this budget is devoted to salaries while 7.2% is devoted to IT. ERE's budget is approved by its board, and it has full autonomy in budget implementation.

Apart from MEDREG, ERE is involved in or cooperates with the following international or regional associations or organisations:

- ARERA
- Energy Community
- CEER
- USAID/ NARUC
- IGU (International Gas Union)
- ERRA
- ACER

5.1.5 Enforcement

In case of non-compliance, ERE may sanction the sector participants as well as impose a temporary prohibition on their professional activities. It may publish comparative reports demonstrating the insufficient performance of the network operators. ERE has a procedure for avoiding deadlock in its board decisions; at least three board members are needed to achieve a decision-making quorum, and the decisions are adopted by most of the members.

5.1.6 Transparency and accountability

ERE's official website has updated information about its mission, duties, organisation chart and reports to the stakeholders. The website provides information on the primary and secondary legislation of the power and natural gas sectors, all of ERE's decisions, the registration of the licensees and the license conditions; however, commercially sensitive information is protected. Almost all information on the website is available in English.

Before taking the final decision on its drafts, ERE consults in different ways with the stakeholders, with a clear preference for public hearing and written consultation. As mentioned above, at least three board members are needed to achieve a decision-making quorum, and the decisions are adopted by most of the members. ERE has a reporting obligation to the parliament.

5.2 CREG (Algeria)

5.2.1 Legal status

The Algerian Commission de Régulation de l'Électricité et du Gaz (CREG) was created under Law No. 02-01 on February 5, 2002 to regulate and control the electricity and gas sectors. As an independent body, CREG can make its own decisions under the terms of its founding law, procedures and regulations.

5.2.2 Independence

a. Political and legal independence

CREG is an independent organisation with legal existence and financial and operational autonomy.

CREG is led by a management committee composed of a chairman and three members appointed by a presidential decree following a proposal by the Minister of Energy and Mines. However, there is no public call for the submission of applications, and the selection criteria are not reported. The duration in office for the chairman and board members is not fixed.

The position of a CREG board member is considered incompatible with other professional activity, public employment and a direct or indirect position in a company in the energy or business sectors. Any board member found to violate this condition is declared as resigned from their position. However, even in such cases, a presidential decree is required.

Moreover, the chairman and/or board members can be removed from office if they have a criminal record. So far, this has not happened. The decisions of CREG are taken by a simple majority and are only valid if they are taken in the presence of three board 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 representatives from the relevant ministerial departments. Operators, consumers and CREG employees may also be members of the advisory board. The advisory board supports and advises the management committee. The recruitment process for hiring staff members is carried out by open, public applications.

The table below summarises the formal obligations of CREG vis-à-vis the government.

b. Financial independence

CREG is financially independent. It is funded through license fees collected from end consumers. CREG has the power to set the level of the fees to meet budgetary needs in the tariff setting process. The Ministry of Finance, through

Table 4. CREG's formal obligations for approval

Obligations	Government
Tariff methodology	X
Opinions on issues of supply security	
Opinion on national development plans	X
Draft budget	X
Annual work plan	
Annual activities report	X

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 of CREG's decisions remain in effect pending appeal. They may be subject to judicial appeal before the state council. The decisions of the arbitration chamber are not subject to appeal.

5.2.3 Competences

a. Access to information

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

b. Security and quality of supply

CREG monitors the medium- and long-term supply/demand balance. It estimates the future demand and the technical capacity required to meet this demand. It also has the right to make necessary arrangements for meeting the needs of the domestic market. CREG draws up an indicative program of the needs of power plants over the next 10 years, which is submitted for approval to the ministry in charge of energy. CREG approves the development plans of electricity and gas transmission networks submitted by the concerned TSOs. It has the right to launch a tender procedure for the development of new power production facilities in case of lack of offers. CREG may provide an opinion related to establishing the standards for supply security. CREG also has competences over ensuring good-quality service, and it has the power to consult the operator and inform the Ministry of Energy and Mines.

c. Market opening and market monitoring

Being a part of the SONELGAZ group, the Société Algérienne de Production de l'Électricité (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'Électricité. 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; under it, if certain conditions are met, CREG 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 and financial authorities. As market opening has not yet been implemented, CREG has no role in preventing the abusive practices that affect wholesale energy markets or in detecting and investigating market manipulation practices. However, CREG ensures that others do not exercise dominance on the management of the system operator and market operator.

d. Tariff setting

The tariff methodology is defined as an executive decree. CREG sets 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 the data used for the calculation of tariffs according to the tariff methodology.

CREG can make the TSO and DSO modify their 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.

According to the provisions of the pertinent legislation, CREG can include performance-based components in the tariff methodologies, but the mechanisms to apply them do not exist yet.

e. Licensing

CREG issues licenses for new power plants and can also review and monitor the compliance of licensees with the terms and conditions of the license. If a licensee is found to be in breach of the

terms and conditions, CREG reports the case to the Ministry of Energy and Mines, which imposes sanctions. The average time to deliver a license is four months, starting from the application date.

f. Dispute settlement

An arbitration chamber is established within CREG. This 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 members, including the president and three alternate members appointed by the Minister of Energy for a period of six years (renewable) and (ii) two 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 between the industry and customers. Any affected party can put forth a complaint against a TSO or DSO on issues related mostly to grid access and bills. The decisions of the arbitration chamber are not subject to appeal.

g. Unbundling

CREG establishes guidelines for the unbundling of accounts as well as rules regarding the allocation of costs resulting from the unbundling process. It has the power to conduct an assessment of whether the sector participants are sufficiently unbundled, and it can mandate changes in the accounting practices. CREG also has powers over the equalisation fund, using which it manages to draw up guidelines for the compliance review and the reporting obligations regarding the unbundling process.

h. Technical competences

CREG has consultative powers to the ministry of Energy and supports it regarding the regulations and procedures for operators. More specifically, CREG is entrusted with

- achieving and controlling the distribution of gas by pipeline;
- engaging and consulting with public authorities

for the organisation and functioning of the electricity and gas markets; and

- supervising and monitoring compliance with the 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 concessions to the Minister of Energy;
- pre-approves the rules and procedures of operation of the system operator and market operator and the manager of the gas transport network;
- ensures the neutrality of the manager of the gas transport network, the system operator and market operator in relation to other stakeholders;
- ensures that other actors do not exercise dominance on the management of the system operator and market operator;
- monitors and evaluates the performance of public service obligations;
- makes a prior decision, in the context of legislation in effect, on operations of corporate concentration or on the acquisition of one or several electric companies by another company that exercises the activities;
- approves electricity transmission networks and gas development plans submitted by network managers and monitors their 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 authorisations 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. It receives complaints and is 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, it monitors the time taken by the operators for the realisation of new connections and repairs. However, it does not have the power to intervene or sanction the operators. CREG also cannot address issues related to vulnerable customers. Such tasks are assigned to the Ministry of National Solidarity, Family Affairs and the Status of Women.

5.2.4 Internal organisation

CREG can decide on its internal organisation (except for the organisation of the management committee). It can also decide on its HR policy (hiring and firing staff, staff allocation/staff composition). There are no specific criteria or procedures related to hiring staff members, such as official entrance exams conducted by the central government. The management committee is the final decision-making authority for the selection of staff members.

The staff salaries at CREG are at the level of 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 59 staff members, and around 42% of its budget is allocated to salaries and 8–9% is devoted to IT. No formal code of ethics that binds the staff members is in place.

The latest approved annual budget for CREG is 2.36 M€. This corresponds to a budget of 0.236 € per consumer for the electricity sector or to a 112.4€/MW installed capacity. CREG considers this budget to be sufficient for properly performing its mission.

Apart from MEDREG, CREG is involved in the following international or regional associations or organisations: Regular-E, AFUR, AERF.

5.2.5 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 the performance of the network operators or apply a tariff incentive regulation to penalise the operators' violations or inefficient performance; thus, in practice, it has limited enforcing powers.

5.2.6 Transparency and accountability

Information on CREG (its missions, duties, organisation chart, reports) is made available on its website, which is available in Arabic, French and English. General information on regulatory issues and practices, such as licensing, tariffs and market-monitoring data (except confidential data), can also be found on the website. The authority has a defined communications strategy involving press releases and its website. By law, CREG is not obliged to consult any other body before making final decisions. The decisions are made by majority vote within the executive committee. To avoid deadlock in regulatory decisions, the president has a deciding vote. CREG issues an annual report. Its only reporting obligation is to the Ministry of Energy.

5.3 SERC (Bosnia and Herzegovina)

5.3.1 Legal status

The State Electricity Regulatory Commission (SERC) is an independent institution that acts in accordance with the principles of objectivity, transparency and equality. It has jurisdiction over and responsibility for electricity transmission, transmission system operation and international trade in electricity as well as the 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 the appointment of the commissioners. SERC became operational in June 2004. SERC is a non-profit institution and is financed by regulatory fees, which are paid by the licensed entities.

5.3.2 Independence

a. Political and 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 the government or other public and private entities when carrying out regulatory tasks, as laid out in Article 2 of its statutes. The establishment of SERC was solely based on legislation; therefore, it cannot be liquidated by another public institution. SERC consists of three commissioners, two from the Federation of Bosnia and Herzegovina and one from Republika Srpska. This reflects the equal representation of the constituent peoples of Bosnia and Herzegovina, who then annually elect a chairman from among the commissioners.

The nomination and appointment processes of the commissioners must be prompt, including the selection criteria, selection committee and right of resource by the candidates. After the establishment of the first composition of SERC, each subsequent commissioner will be appointed for a period of five years. No person may act as a commissioner for more than two terms.

SERC's staff, including the board members, cannot be directly or indirectly employed by or have any contractual relationship with the entities involved in the regulated sectors or with other entities whose activities may conflict with SERC's duties and responsibilities. They also cannot hold any shares or interests in the entities involved in the regulated sectors.

SERC's commissioners can be dismissed in following circumstances:

- An illness renders the commissioner incapable of performing their duties.
- They are convicted of a crime punishable by imprisonment.
- A commissioner or member of their staff has a conflict of interest as defined in SERC's code of ethics. This includes a commission member, staff or a member of their household being (i) an owner, shareholder or holder of shares, (ii) a member of the boards or supervisory boards or other relevant governing bodies or (iii) the director, president or other manager of any licensee or other undertakings that directly or indirectly seek access to or usage of the transmission network.
- They resign.
- They do not perform their duties, as reflected by the failure to participate in SERC proceedings for a period longer than six weeks.
- They commit violations of SERC's code of ethics.

There is no cooling-off period after the conclusion of the board or staff members' service with SERC.

The table below summarises the formal obligations of SERC vis-à-vis the government and parliament:

Table 5. SERC's formal obligations for submission

Obligations	Government	Parliament
Budget		X
Annual activities report	X	X

b. Financial independence

SERC has its own financial resources and is financed by license fees procured from its duties and activities in accordance with its financial plan, as laid out in Article 20 of its statutes. SERC should establish a regulatory fee to be paid by license holders, which is designed to cover the estimated SERC expenses. According to Article 4.10. of the Law on Transmission of Electric Power, Regulator and System Operator in Bosnia and Herzegovina, SERC presents the budget to the Parliamentary Assembly of Bosnia and Herzegovina for review. The annual audits of the budget are conducted in accordance with international accounting standards and audited by an independent auditor.

c. Functional independence

SERC's decisions may only be appealed in the court⁶. A party may appeal SERC's final decisions by filing a judicial appeal with the Court of Bosnia and Herzegovina.

5.3.3 Competences

a. Access to information

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

b. Security and quality of supply

SERC monitors the (i) medium- and long-term supply/demand balance in the national market, (ii) expected future demand and envisaged additional capacity, (iii) quality and level of maintenance of the networks and (iv) quality of supply. However, SERC does not participate in

⁶ In the judiciary system of Bosnia and Herzegovina, there are no courts of special jurisdiction, such as administrative courts. Rather, all regulatory decisions are appealed before the Court of Bosnia and Herzegovina. This court is not a supreme or appellate court but has its own jurisdiction and acts as a first and appellate instance in specific issues. The Court of Bosnia and Herzegovina is the competent court for, among other issues, administrative disputes initiated against the decisions of all institutions at the state level.

the implementation of measures to cover peak demand or address any shortfalls of one or more suppliers. It also does not organise, monitor or control the tendering procedures for a new capacity, infrastructure or investment.

c. Market opening and market monitoring

In 2006, SERC prepared and adopted a decision on the scope, conditions and time schedule for opening the electricity market Bosnia and Herzegovina. The electricity market has been fully open since January 1, 2015. The rules for the integrity and transparency of the wholesale electricity market were adopted on May 14, 2020. According to these rules, SERC monitors trading activities in the wholesale electricity market in Bosnia and Herzegovina in order to detect trading based on inside information and market manipulation. However, it cannot regulate, impose or implement the penalties. SERC's jurisdiction over wholesale market regarding investigatory and enforcement powers is limited by the primary legislation. Regarding these issues, SERC cooperates and informs the relevant institutions of Bosnia and Herzegovina (such as the competition authority) to help prevent and penalise the prohibited actions.

d. Tariff setting

SERC has the power to set tariffs and tariff methodologies for the transmission and distribution networks. SERC sets distribution tariffs only for the Brčko District of Bosnia and Herzegovina. Setting distribution tariffs in the Federation of Bosnia and Herzegovina and Republika Srpska is under the jurisdiction of the entities' regulatory commissions – the Regulatory Commission for Energy in the Federation of Bosnia and Herzegovina and the Regulatory Commission for Energy of Republika Srpska. SERC issues rules and regulations establishing a tariff methodology, incorporating several principles. Additionally, SERC sets methodologies for the provision of balancing and ancillary services and approves access to cross-border infrastructures.

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 defines the procedures and criteria for granting licenses, including the procedures for filing and reviewing applications as well as for granting, suspending and revoking licenses. In 2015, the amendments to the licensing rule were adopted. The average time to deliver a license, starting from the date of application, is approximately two months.

f. Dispute settlement

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

g. Unbundling

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

h. Technical competences

SERC has the following powers:

- It issues rules and regulations within its competency that are consistent with the terms of the relevant law and the policies established by the competent ministry. These include the revision and approval of market rules and grid codes as prepared by the ISO. It can also issue the terms and conditions for the connection and access to network.
- It handles the establishment, monitoring and enforcement of rules related to fair and non-discriminatory TPA to the transmission network.
- It monitors and enforces the conditions related to international trade in electricity; in particular, it ensures that international technical requirements are met and adhered to.
- It establishes, monitors and enforces the quality standards for electricity transmission and ancillary services.

- It coordinates and approves the investment plans of the company for the transmission of electric energy, including those plans related to the transmission network and the quality of electricity transmission.
- It issues licenses and monitors the activities of the ISO, including the efficiency of the mechanisms and methods for securing a system balance between the demand and supply of electricity. It also approves the mechanisms for handling congested capacity within the electricity transmission system.
- It regulates the standards of service, codes of conduct and accounting requirements for the licensees.

Moreover, SERC maintains an audited account of the revenues collected pursuant to congestion management mechanisms.

i. Consumer protection

Concerning consumer protection in the energy sector, SERC's jurisdiction and authority include ensuring fair and non-discriminatory treatment, providing high-quality services, promoting competition and preventing anti-competitive activity. SERC does not have the direct power to address vulnerable consumers' issues, which are managed through the country's social policy.

5.3.4 Internal organisation

The work of SERC is organised within four departments: (i) tariff and market department, (ii) licensing and engineering department, (iii) finance and administrative department and (iv) legal department.

Each organisational unit has specific functions as provided in SERC's statutes. In addition to, or as a replacement for, these organisational units, the commissioners may designate other permanent or temporary organisational units to better carry out SERC's activities. SERC can decide on its internal organisation as well as its HR policy (hiring and firing staff, staff allocation/staff composition). There are specific criteria or procedures for hiring staff members, such as official entrance exams conducted by the central government.

The management committee is the final decision-making authority for the selection of staff members.

The salary levels at SERC are like those of civil servants, government officials and industry personnel in the energy sector. There is no legal restriction on the number of staff members. Currently, SERC has 19 staff members. Its latest annual budget is 986.000 euros, and about 50% of this is allocated to salaries and 10% is devoted to IT. Moreover, a formal code of ethics binding the staff members and commissioners is in place.

5.3.5 Enforcement

SERC cannot sanction the entities in the regulated sector, but it can somewhat constrain them. Specifically, it cannot revise tariffs or reduce rates of return in response to violations but has other enforcement mechanisms, such as the temporary prohibition of professional activities (for instance, by suspending or revoking the license). In the past, SERC has suspended and revoked licenses a few times for parties that did not comply with the licensing conditions.

5.3.6 Transparency and accountability

SERC publishes its budget and business report annually and strives to ensure that its acts are easily accessible by the public for review. SERC can issue special publications, newsletters and bulletins and has a web page for informing the public about its work. Moreover, SERC may seek informal public input while drafting rules and regulations. It also gives prompt formal public notice of the public's chance to comment on the drafts before SERC adopts the final rules. SERC has reporting obligations towards the parliamentary committees and both houses of the Parliamentary Assembly of Bosnia and Herzegovina.

5.4 HERA (Croatia)

5.4.1 Legal status

The Croatian Energy Regulatory Agency (HERA) is an independent, public and non-profit organisation set up to establish and implement the regulation of energy activities⁷. HERA was created in 2004 by the

⁷ The legislative framework for the performance of HERA's

Act on the Regulation of Energy Activities (Official Gazette No. 177/04) and has continued to operate according to this act (Official Gazette, No. 120/12, 68/18).

HERA has the legal authority to preside over the regulation of electricity, natural gas, oil and oil derivatives⁸ and thermal energy. HERA's activities should be performed in the interest of the Republic of Croatia and in accordance with the principles of transparency, objectivity and impartiality.

HERA is the only entity responsible for regulating the Croatian energy sector, and it must hold public consultations when defining tariff methodologies.

5.4.2 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 organisational framework for its 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 the aforementioned governmental act (Official Gazette, No. 120/12), and in 2019 (Class: 011-01/13-01/05, Reg:371-06/19-20). According to its statute, HERA's decision-making process and professional environment should be built around the principles of transparency and efficiency.

activities comprises the following regulations: Regulation of Energy Activities Act (Official Gazette, No. 120/12, 68/18); Energy Act (Official Gazette, No. 120/12z, 14/14, 102/15, 68/18); Electricity Market Act (Official Gazette, No. 22/13, 102/15, 68/18, 52/19); Gas Market Act (Official Gazette, No. 18/18, 23/20); Thermal Energy Market Act (Official Gazette, No. 80/13, 14/14, 86/19); Oil and Oil Derivative Market Act (Official Gazette, Nos. 19/14, 73/17, 96/19); Biofuels for Transportation Act (Official Gazette, Nos. 65/09, 145/10, 26/11, 14/14, 94/18144/12); 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 licenses for performing energy activities (Official Gazette, Nos. 88/15, 114/15, 68/18; Decision on the amounts of fees for the regulation of energy activities (Official Gazette, Nos. 155/08, 50/09, 103/09 and 21/12);

⁸ HERA does not regulate the prices of oil and oil derivatives.

HERA is managed by a board of commissioners, which consists of five members, including the president, who manages the board. The members of this board are appointed by the Croatian Parliament upon the proposal of the government. They are appointed 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 must specify the eligibility criteria for the election of the president and board members, the candidacy documentation and the deadline for applications. The election should be conducted in such a manner that a new board member is elected to replace the member whose term of office is about to expire. At least 30 days prior to the expiry of a member's mandate, the Croatian government should propose to the Croatian Parliament to relieve that member of their duty. It should also provide the parliament with a certified list of candidates for the vacant position. Meanwhile, HERA's staff members are selected through transparent public calls.

HERA comprises five divisions that provide expert, administrative and technical services: (i) electricity, (ii) gas and oil, (iii) thermal energy, (iv) legal affairs and HR and (v) support services.

These divisions are managed by the directors, who oversee all the professional aspects related to the regulation of the sector. They are nominated by the president of the HERA Board of Commissioners according to standard public tender procedures.

To avoid conflicts of interest, HERA has enforced a rule that prevents board members from being

employed in the regulated entities while holding their positions at HERA. The board members and their families should not own or hold shares or stakes in any energy undertaking for more 0.5% of the capital stock. They should not be members of the management board, supervisory board or any other bodies of an energy undertaking. They also cannot hold any material interest in the area of energy activities or perform any other work in an energy undertaking, as this may lead to conflicts of interest. Finally, they cannot be active members of any political party.

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

The board members should respect a cooling-off period of one year after leaving their position at HERA. During that time, they cannot represent, before HERA or its board, an energy undertaking that has been licensed to perform a regulated energy activity and/or an activity performed as a public service. They also cannot represent any other body that is controlled, directly or indirectly, by such an energy undertaking. The board members cannot have employment obligations outside HERA.

Table 6. HERA's formal obligations for approval

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

At the request of the government, HERA must submit reports on its technical and financial operations as well as on specific issues in its scope of work; these may also be for periods shorter than one year.

HERA should annually submit a report of its work to the Croatian Parliament, particularly on the results of monitoring the compliance of energy undertakings with the obligations specified in Act on the Regulation of Energy Activities and the Energy Act (Official Gazette Nos. 120/12, 14/14, 102/15, 68/18) as well as the acts regulating specific energy activities. HERA must also report on (i) its budget performance in the previous year, (ii) the analysis of the energy sector, (iii) important observations on the development of the energy market and public services in the energy sector and (iv) the compliance with the legally binding decisions of the ACER and the commission.

The HERA Board of Commissioners should harmonise its statute with the provisions of the Act on the Regulation of Energy Activities and request approval from the Croatian Parliament on the statute.

b. Financial independence

Pursuant to the decision of the Croatian government on the amount of fees required 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 from the following sources:

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

These fees are defined by the law.

HERA controls the use of its financial resources and does not have to seek approval for its budget.

However, since January 2017, HERA must plan its budget within the overall state budget. Its financial reports are subject to yearly audits performed by a certified independent auditor.

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

c. Functional independence

All of HERA's decisions are binding. However, the energy entities can appeal these decisions in administrative courts.

5.4.3 Competences

a. Access to information

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

b. Security and quality of supply

HERA monitors the medium- and long-term supply/demand balance of the Croatian electricity markets, but it does not monitor the medium- and long-term supply/demand balance of the gas market. It also oversees the expected future demand for energy and the technical capacity necessary to meet that demand. It 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 analyses the submitted investments; it conducts public consultations and approves the 10-YNPD plan submitted by the TSO. Within the tariff application for the regulatory period, the DSO submits the planned investments. HERA evaluates, analyses and approves the DSO's planned investments within tariff approvals. The planned investments in the construction and reconstruction of the transmission/distribution system approved by HERA must be technically reasonable and cost-effective; they 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. However, the former vertically integrated utility, Hrvatska Elektroprivreda HEP, via its daughter companies, is the most dominant 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, the Croatian Power Exchange CROPEX was established, organising day-ahead auctions. In April 2017, CROPEX organised its first intraday auction.

Croatia entered the inter-TSO compensation mechanism in 2008, eliminating transit fees. HERA approves rules for the allocation and usage of cross-border capacities. Currently, JAO is responsible for organising yearly, monthly and daily auctions at the borders of Croatia and Hungary as well as Croatia and Slovenia. Meanwhile, SEE CAO is responsible for organising yearly, monthly and daily auctions at the border of Croatia and Bosnia and Herzegovina. Furthermore, intraday joint bilateral auctions are conducted at the borders of Croatia and Slovenia as well as Croatia and Bosnia and Herzegovina. Furthermore, joint bilateral auctions are organised at the border of Croatia and Serbia for yearly, monthly, daily and intraday timeframes.

The gas sector is unbundled, and the market is open by the Gas Market Act as of August 01, 2008. Thus, all customers are deemed eligible and can freely choose a supplier and negotiate a price; however, in practice, as with electricity, one entity dominates the market.

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

d. Tariff setting

HERA enacts the methodologies for calculating the amount of tariff items for electricity transmission and distribution networks and then defines this amount. It adopts the amount of tariff items for transmission and distribution and for accessing cross-border infrastructures. Additionally, HERA adopts and approves methodologies for the provision of balancing and ancillary services⁹.

According to the tariff methodologies, HERA performs regular audits of the allowed revenues; these are performed in the last year of the regulatory period. As part of it, the difference between the realised revenue and the audited allowed revenue is determined so that it can be distributed to the following regulatory period.

An additional measure is the option of performing an extraordinary audit of the allowed revenue during the current regulatory period. This extraordinary audit is performed due to unexpected changes in the market that have a significant impact on the conditions of providing the energy activity, which the system operator(s) could not have foreseen, prevented, eliminated or avoided.

In the gas sector, HERA also sets the tariffs for public service gas supply and SoLR supply for all public service gas suppliers in Croatia. It also sets the elements and criteria for calculating the price of non-standard services and determines the amount and method of collecting fees for organising the gas market. HERA can include performance-based components in the tariff methodologies and penalise 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 investments consistent with best practices.

As part of its ex-ante setting process, HERA follows a transparent and inclusive process when

⁹ In the gas sector, the provision of balancing and ancillary services is prescribed by the Rules on the Gas Market Organisation (Official Gazette, No. 50/18) and the network code of the transmission system (Official Gazette, Nos. 50/18, 31/19, 89/19 and 36/20). Before adopting these by-laws, the gas market operator and TSO must obtain approval from the agency.

adopting general rules and decisions. This involves full consultation with the operators as well as the associations representing the interested parties (consumers, environmental organisations, trade unions and business associations). This is performed by circulating documents and collecting written observations, which are then discussed during collective and individual hearings prior to issuing any provisions. These hearings are governed by specific regulations, which allow the associations to bring specific and urgent questions to HERA's attention and propose that these be discussed during the hearing.

e. Licensing

Licensing requirements in Croatia are consistent with the general practice within the EU member states; licenses are required 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 has the power to modify them. The average time to deliver a license is 30 days from the date of application. HERA also reviews and monitors licenses as well as the energy undertaking's compliance with the terms and conditions of the license. It may temporarily or permanently revoke a license. In such cases, HERA also has the authority to order the transfer of the plants, facilities, appliances, networks or systems of that energy undertaking to another energy undertaking, provided that the license was not cancelled due to safety failures in these plants, facilities, networks or systems.

In case a new generating capacity is authorised, the Ministry of Environment and Energy approves the construction of the generating facilities (for the production of electricity). On its part, HERA gives the ministry its opinion regarding the procedures and criteria for approval and construction. In the interest of the security of supply, the ministry can propose the construction of a new generating capacity to the government. HERA is required to give its opinion on the proposal.

f. Dispute settlement

HERA is responsible for settling disputes between industry actors as well as between industry actors

and consumers. HERA resolves grid access, TPA and cross-border complaints, subject to judicial review. Most complaints concern the conditions for accessing the grid. HERA generally monitors objective, transparent and non-discriminatory conditions for system access, which the largest number of complaints are concerned with.

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 has been organised as an independent legal entity independently of other activities in the electricity and gas sectors. For the gas sector, the TSO (PLINACRO) is organised according to the ownership unbundling model, but the certification process is still ongoing.

Unbundling is carried out to achieve the objectives of transparency and standardisation in the annual accounts of companies operating in the regulated sectors as well as the objectives of monitoring the costs of individual services. Moreover, separate accounting ensures regular and effective control of prices, valid tariffs, fees and price lists for performing certain energy activities (Official Gazette, no. 111/18). The mentioned decision also prescribes rules for the classification of accounting categories to certain energy activities.

h. Technical competences

HERA issues secondary legislation; however, market rules, grid codes and other such technical rules are issued by transmission and distribution operators and approved by HERA. HERA only approves rules regarding congestion management and does not actively participate in it. Consequently, 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 grant exemptions for TPA to new investments. Moreover, it supports the development of RES and promotes energy efficiency measures.

HERA approves the aforementioned exemptions for new infrastructures. The decision on the

exemption for a new infrastructure 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.

In the gas sector, the TSO must obtain HERA's approval before adopting the network code of the transmission system, which, among others, prescribes congestion management rules.

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

i. Consumer protection

Alongside the other relevant authorities, HERA is tasked with the application of comprehensive customer protection measures, such as

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

Like 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 oversees the implementation of economic and non-economic support measures for vulnerable consumers. Moreover, using several tools, consumers are informed about their rights and prompted to check and monitor energy prices.

5.4.4 Internal organisation

HERA can autonomously decide on its HR policy based on internal regulations, which include a binding code of ethics. Its staff recruitment 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 rather to general labour regulations.

HERA's board has the authority to set and remove penalties and incentives for staff members. Staff salaries (including those of the board members) are set by an internal act and are similar to those of national civil servants. There is no legal restriction regarding its number of employees. HERA currently has 78 staff members, including five board members, 11 employees in the office of the president of the board, one in the Independent Department for Internal Auditing, 10 in the Electricity Division, 17 in the Gas and Oil Division, eight in the Thermal Energy Division, 13 in the Legal and HR Division and 13 in Support Services.

HERA's budget for 2020 is € 4.215.308, about 78% of which is devoted to salaries and 1.9% to IT. Apart from MEDREG, HERA is a member of CEER (Council of European Energy Regulators) and ERRA (Energy Regulators Regional Association). HERA actively participates in the board of regulators and working groups of ACER, the working groups established by the European Commission as well as the ECRB.

5.4.5 Enforcement

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

The law envisages other forms of enforcement such as sanctions, commitments for future compliance and HERA not publishing comparative reports on the performance of network regulators. The HERA Board of Commissioners takes decisions by simple majority, with each member possessing one vote.

5.4.6 Transparency and accountability

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

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

HERA issues an annual report and has a reporting obligation towards the parliament and government of Croatia. It appears annually before the parliament and the relevant parliamentary committees.

5.5 CERA (Cyprus)

5.5.1 Legal status

The Cyprus Energy Regulatory Authority (CERA) is the national energy regulatory authority of the Republic of Cyprus. It was established and organised in 2004 by Law 122 (I) 2003 (later amended and complemented) for the purposes of harmonising the Cyprus internal legislation with the EU.

The operations of CERA are controlled by regulations, which are issued in accordance with the authorisations of the aforementioned law. The regulations determine, among other aspects, the procedures for issuing 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 CERA's role more important. CERA is assisted by the Office of CERA, which is independent to CERA; this is also provided by Law 122 (I) 2003.

5.2.2 Independence

CERA is legally and functionally independent of any other public or private entity. According to Article 9 of the Laws Regulating the Electricity Market of 2003–2018, the Office of CERA does not belong to any ministry or department of the government. It may take autonomous decisions independently of any political organisation and has budgetary autonomy and sufficient human and financial resources. CERA has the authority to appoint the personnel of the Office of CERA as needed.

a. Political and legal independence

CERA consists of three members appointed by the Council of Ministers of the Republic of Cyprus after consultation with the Parliamentary Committee on European Affairs. The council appoints one of the members as the chairman and another member as the vice chairman of CERA. All members of CERA give oral reassurance to the country's president of the due execution of their duties. The appointment of a person as a CERA member is for a period not exceeding six years, and each member is limited to a maximum of two terms of office. The staff of the Office of CERA is appointed by the members of CERA. CERA publishes the vacancies in the Official Gazette of Cyprus. CERA, after receiving the applications, prepares a list of candidates who possess the necessary qualifications and proceeds with the evaluation and appointment processes.

All members of CERA are people with high moral and professional standards and are bound, in the exercise of their duties, by the provisions of CERA's internal legislation; they are obliged to comply with the principles of independence and impartiality and act independently of all economic and political interests. Specific provisions of the Law 122 (I) 2003 clearly foresee that the members of CERA should 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 competences.

According to Article 5(2) of the Laws Regulating the Electricity Market of 2003–2018, during their terms of office, the members of CERA

- will not have any financial or other interest, including interest in shares, in any company conducting any business in the energy sector;
- will not accept or retain employment in an office or a position from which payment of any kind is reasonably expected regardless of whether it is actually paid; and
- will not be political party officials.

According to the regulations on recruitment, promotion, service and disciplinary control, no employee can be directly or indirectly involved in a business or hold a position other than their position in the Office of CERA. In exceptional cases, CERA may grant permission to an employee for part-time employment or recruitment if this does not directly or indirectly affect the performance of the employee's duties in the Office of CERA. Moreover, the members of CERA may not be employed or otherwise maintain positions in the administrative, municipal and public sectors, the Electricity Authority of Cyprus (EAC) or the companies under its supervision; they cannot be employed in the private sector either. A member's failure to comply to these provisions may result in their dismissal, following a decision of the Council of Ministers; such decisions are communicated to the House of Representatives of the Republic of Cyprus.

The Council of Ministers can remove a person holding office as a CERA member prior to the termination of their term of office if they

- suffer from a mental or physical ailment that renders them incapable of performing their duties;
- behave improperly or neglect their duties;
- behave in a manner that is inconsistent with their responsibility to maintain the independence of their position;

- fail to disclose, prior to their appointment, a fact or event that may have prevented their appointment;
- are sentenced by a decision of a competent court for a criminal offence for violating the law; or
- are sentenced by a decision of a competent court for a criminal offence concerning lack of honesty or immorality.

The members of CERA and the Office of CERA do not have any personal liability in civil matters relating to their actions, omissions, opinions, reports or other documents they prepared during the execution of their duties and competences, as long as they complied and acted in good faith, pursuant to Law 122 (I) 2003 and the regulations and decrees executed thereto.

Moreover, for a period of two years after the expiry, dismissal or termination of their term of office, all members of CERA should 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; otherwise, they may be subject to penal sanctions.

CERA is accountable for the performance of its duties, powers and competences to the president and, for this purpose, submits to the latter its annual report; copies are sent to the Council of Ministers and the House of Representatives. The annual budget of CERA is submitted to the Council of Ministers and the House of Representatives for approval. Moreover, CERA issues regulations with the approval of the Council of Ministers, which are filed to the House of Representatives for approval.

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. 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 fees are defined by law¹⁰.

¹⁰ "Regulating the Electricity Market (License fees) Regulation"

The annual budget of CERA and the Office of CERA for the fulfilment of their financial program is submitted by CERA to the Council of Ministers before July 1 of each year to be approved by the Council of Ministers and the House of Representatives. CERA keeps the proper financial records and accounts for the activities of CERA and the Office of CERA. It also drafts a respective review. All of these are inspected by the Auditor General of the Republic of Cyprus. CERA does not own its premises. CERA's registered seat and offices are in Nicosia.

c. Functional independence

The decisions, decrees and administrative penalties issued or imposed by CERA, including those concerned with granting, amending and revoking licenses, may be challenged before the supreme court by all interested parties, pursuant to Article 146 of the Constitution of Cyprus and the relevant jurisprudence. Moreover, the Office of CERA 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, competences, powers and activities of CERA and the Office of CERA. The Office of CERA may be legally represented by a practicing lawyer and/or a member of its personnel.

5.5.3 Competences

CERA has a wide range of duties, responsibilities, competences and authorities; These aim 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.

a. Access to information

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 competences. It may also, on its own initiative or to further probe a relevant complaint, conduct investigations into the activities and operations of the supervised

(KDP 467/2004) and "Regulating the Electricity Market (License fees) Amending Regulation" (KDP 365/2007).

legal entities, pursuant to the provisions of the respective legislation.

b. Security and quality of supply

CERA monitors the (i) security of the energy supply, especially with regard to the balance between supply and demand in the energy market, (ii) anticipated future demand, (iii) anticipated additional electricity and natural gas production, (iv) transmission and distribution potential already programmed or under construction, (v) standard and level of maintenance as well as the reliability of transmission and distribution systems and (vi) application of measures to cover peak demand and conditions on the energy market in terms of the ability to develop new production potential. It also takes the necessary legal measures for the above targets, including the drafting and application of a 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). For this purpose, CERA is competent for collecting and processing information from companies in the energy sector while respecting the principles of confidentiality.

CERA monitors the efficiency of the wholesale and retail markets as well as the development of competition in these markets; this includes cross-border transactions, the prices for household customers, switching percentage and procedures, disconnections, the quality of services regarding the supply and maintenance services, customer complaints and any distortion or limitation in competition. The Minister of Energy, Commerce and Industry – after consultation with CERA and after informing the House of Representatives – may, by decree, determine the necessary level for the opening of the country's electricity market.

The reform framework for the full commercial operation of the competitive electricity market in Cyprus is shaped in such a way that it is compatible with the target model of the EU, which has been adopted by most member states of the EU and has been established by CERA's regulatory decisions in the previous years.

To cover the time until the full commercial operation of the new electricity market model, CERA issued a regulatory decision for the introduction of a transitory regulation in the electricity market, including detailed regulations, which has been in force since 2017. The transitory regulation of the electricity market concerns “bilateral contracts between producers and suppliers”.

CERA also ensures the implementation of proper mechanisms for the inspection, transparency, efficient competition and operation of the energy market so as to avoid any abuse of dominant positions, predatory and anti-competitive behaviour and aggressive behaviour against consumers. For these purposes, CERA may cooperate with the competition authority. CERA is the competent authority for the implementation of Regulation 1227/2011 on wholesale energy market integrity and transparency.

d. Tariff setting

CERA approves and publishes the methodologies used to establish transmission and distribution network tariffs. It also determines and approves the methodologies for the provision of balancing and ancillary services as well as access to cross-border infrastructure. It is involved in setting the grid connection fees. CERA's decisions may be subject to judicial review. CERA can include performance-based components in the tariff methodologies and can penalise a non-performing service by reducing the company's rate of returns from the tariffs.

Cyprus uses a mix of ex-ante and ex-post price regulation for all tariffs and consumers, except for the social tariff for low-income households. Tariffs are set ex-ante, and, in some instances, adjustments are made on an ex-post basis depending on the tariff methodology.

An incentive-based tariff methodology is followed. The tariffs are determined on the basis of a methodical and consistent application of the principles set out in the methodology (Regulatory Decision 02/2015; “Statement on Regulatory Practice and Methodology of Electricity Tariffs”). The proposals and decisions about tariffs are evidence-based and formulated after thorough consultation with the parties concerned.

e. Licensing

According to section VI of Law 122 (I) 2003, CERA is competent for granting, amending and revoking licenses for energy-related activities, pursuant to the principles of transparency and equal treatment. It must take into account the specific attributes of the applicants, consumer protection and environmental protection as well as the need to safeguard healthy competition, the security of supply, energy efficiency, public interest and 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. The average time needed to deliver a license is three months from the date on which the application is considered complete. CERA may decide to extend the period, and the applicant should be notified in writing by CERA of the reasons and duration of the extension, which should not exceed three months.

f. Dispute settlement

CERA is responsible for answering complaints that are not related to alternative dispute resolution (ADR) activities. Two ADR bodies have been appointed to solve consumer dispute issues between consumers and suppliers. CERA is responsible for resolving disputes between licensed participants and issues concerning the terms of connection to the transmission and distribution networks. However, in accordance with a recent draft bill that was under public consultation and is currently under legal vetting, CERA is becoming or should act as an ADR for the energy sector.

g. Unbundling

Cyprus, according to Article 66 (Derogations) of the Directive (EU) 2019/944 on common rules for the internal market for electricity, has obtained an exemption from Article 43, which concerns the ownership unbundling of transmission systems and TSOs.

Under the current legislation, the electricity TSO, which is legally unbundled, acts independently from the production, distribution and supply

activities to safeguard TPA to the transmission network and equal treatment of all network users. Currently the Cyprus TSO is located separately from the EAC. The TSO presents itself to the customers as a separate entity with its own name, logo and website. All of its employees are provided by a single, vertically integrated utility, namely the EAC.

h. Technical competences

CERA is competent to monitor the performance of the TSO and DSO and their compliance to Regulation (EU) 2019/943 on the internal market for electricity and Directive (EU) 2019/944 on common rules for the internal market for electricity. CERA can also approve the investment program of the TSO and monitor its implementation and, through its respective annual report, evaluate the aforementioned program, pursuant to the provisions of the European Regulation 2019/943. It can consider and decide on amendments to the respective development plans. Furthermore, CERA may set incentive regulation, support the development of RES and promote energy efficiency measures. CERA also monitors the time needed for the TSO and DSO to connect users, effect repairs and provide services to system users.

CERA may impose effective, proportionate and dissuasive sanctions on electricity undertakings that fail to comply with their obligations under the Laws Regulating the Electricity Market of 2003–2018 or any relevant, legally binding regulatory decision. It can also propose that a court should impose the sanctions.

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 and switching. Regarding vulnerable customers, CERA has the power to define policies, approve prices and implement government measures via the energy sector. It can also consult the Minister of Energy for the provision of public service obligations to the consumers.

CERA, exercising its powers under the Laws Regulating the Electricity Market of 2003–2018, issued the Regulating the Electricity Market (Performance Indicators) Regulations of 2005 (Act 571/2005). This was done with the approval of the Council of Ministers and the House of Representatives. The regulations include the obligations of the supplier and/or the owner of the distribution system, consumer rights, performance standards and minimum performance levels as well as the fines imposed in case the supplier and/or the owner of the distribution system fails to comply.

5.5.4 Internal organisation

Administrative and technical support is provided to CERA by the Office of CERA. The Office of CERA is a legal entity independent of CERA. It is divided into 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.

The Office of CERA is headed, inspected and supervised by CERA. The staff of the Office of CERA is appointed by the members of CERA. CERA publishes the vacancies in the Official Gazette of Cyprus. CERA, after receiving the applications, prepares a list of candidates who possess the qualifications and proceeds with the evaluation and appointment processes. The Office of CERA personnel are employed and operate according to the directions of CERA. CERA, exercising its powers according to Articles 8 and 97 of the Laws Regulating the Electricity Market of 2003–2018 and with the approval of the Council of Ministers, issues the regulations on recruitment, promotion, service and disciplinary control. For issues these regulations do not explicitly consider, the provisions of the Public Service Law will apply. The salaries of the staff and board members are similar to those of civil servants, government officials and industry personnel, particularly in the energy sector. The salaries of the board members are set by the Council of Ministers, while the staff salaries are established according to the set pay scale for public officials. There is no legal restriction on the number of staff members.

As of May 2020, CERA's staff consists of 18 members: one director, four head energy engineers, four

energy engineers¹¹, two legal officers, one IT staff, one senior administration officer, one assistant accounting officer, two secretaries and two assistant clerks.

CERA's annual budget for 2020 is € 3.215.573; 50.2 % of this is devoted to salaries and 4.1 % is devoted to IT.

Apart from MEDREG, CERA is involved in the following international or regional associations or organisations: ACER, CEER, EC, Energy Community, ECRB.

5.5.5 Enforcement

CERA is competent to issue regulatory decisions. It can impose administrative fines and sanctions to the supervised entities that do not comply to their obligations, pursuant to Law 122 (I) 2003 and the regulatory and binding decisions of CERA. It may also 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 to the TSO or up to 10% of the annual turnover of the vertically integrated company to the vertically integrated company. CERA can also apply other enforcement mechanisms, such as licenserevocation.

The voting procedures are defined in the Regulating the Electricity Market (Decision-making and Operation) Regulations of 2017. The decisions of CERA are taken by most of the present members, and in case of a tie, the chairman – or the vice-chairman in the chairman's absence – has the deciding vote.

5.5.6 Transparency and accountability

By virtue of its annual report, which is published on its website, CERA presents the performance of its competences and duties provided by the relevant legislation. CERA's website is regularly updated with the existing energy legislation, its internal organisation, actions and activities on all supervised energy fields as well as the relevant regulatory decisions. Most of the information on the website is available in English. Before taking a regulatory decision, CERA consults

¹¹ Three permanent and one indefinite time

any license holder, applicant or interested party related to the subject of the decision. It then publishes the draft regulatory decision, calling all interested parties to submit comments for a period of 30 days. CERA also communicates the current developments in the energy sector and presents its activities in conferences, congresses and other events, which raise awareness on its work in the energy sector.

5.6 EgyptERA (Egypt)

5.6.1 Legal status

The Electric Utility and Consumer Protection Regulatory Agency (EgyptERA)¹² was established in 2000 by virtue of Presidential Decree No. 339. It is a public body in terms of its legal structure. However, EgyptERA only became operational (i.e. able to perform its tasks autonomously) in 2002. By virtue of 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. This law specifies EgyptERA's powers and missions, decision-making processes and provisions regarding transparency, independence and impartiality. Additionally, even though EgyptEra develops the tariff calculation methodology and recommends the final tariff to be considered, the Cabinet of Ministers must approve them both.

Over the past decade, EGYPTERA and its predecessor (EEUCPRA) have been actively involved in several international and regional programmes. For instance, EgyptERA was under a Twinning Project funded by the EU ("Strengthening the Institutional Capacity of the Egyptian Electric Utility and Consumer Protection Agency (EGYPTERA)" No. EG/13/ENP/EY/19), whose final report was submitted on October 20, 2017. This project was led by the Greek and Italian regulatory authorities (RAE and AEEGSI, respectively) and

¹² 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.

offered EgyptERA significant contribution and assistance in the process of implementing market reform, as well as in becoming an independent, well-functioning, reliable and efficient regulatory authority performing according to European best practices.

5.6.2 Independence

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

a. Political and legal independence

EgyptERA provides binding regulatory decisions. It is not only autonomous from the governmental and other public and private entities when carrying out regulatory tasks but also distinct and functionally independent from any other public or private entity in general. Furthermore, there are internal rules, applicable via a by-law considering the authority's staff (i.e. board members) and clauses in the experts' contracts, prohibiting EgyptERA's staff from being employed in the energy industry. However, there are no formal rules prohibiting the regulatory authority's staff (i.e. board members and staff) from having interests, such as holding shares, in the regulated utilities or being involved in politics.

EgyptERA must to prepare and submit the tariff methodology, draft budget, annual work plan and annual activities report to the government and the draft budget to the parliament for approval.

The board members of EgyptERA (including the chairman) are appointed by a decree issued by the prime minister for a three-year term, renewable for only one similar term. Meanwhile, a public call is issued for candidates regarding the staff, who are then chosen by a selection committee. The chairman and board members can be removed before the end of their term in cases such as ailing health, resignation or death. This has not yet occurred. The board consists of the chairman, who is the competent minister, as well as the board members, who are from various sectors of the electricity market and the competent ministry. Its composition is as follows:

- the chief executive officer;
- four members who represent the consumers:
 - » chairman of the Competition Protection and Anti-Monopolistic Practices Agency or a nominee from their board of directors;
 - » chairman of the Consumer Protection Agency or a nominee from their board of directors;
 - » chairman of the Egyptian Industries Union or a nominee from their board of directors; and
 - » chairman of the Chambers of Commerce Federation or a nominee from their board of directors;
- three representatives from the electricity utility, who are nominated by the competent minister; and
- four people with expertise in the technical, financial and legal areas and other representatives of the civil society organisations, who are not electricity utility stakeholders.

The chief executive officer represents EgyptERA before the court and in its relations with third parties. The rules regarding the terms of office of the board members are clearly defined and ensure a proper rotation of members.

By virtue of the code of ethics, which has been submitted to EgyptERA's board for adoption¹³, there are special provisions, among others, for the officers' impartiality and confidentiality as well as for the prevention of conflicts of interest for the board members and officers of EgyptERA. In brief, the officers and board members may not have relationships or be placed in situations where their personal, professional, economic or financial interests can enter in conflict with the fulfilment of their functional duties in EgyptERA.

¹³ As of the time of the finalisation of the present report, a new law has been issued in Egypt, providing a code of ethics for civil servants. No further elaboration could be effected on either the application field or the specific provisions.

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

For the officers who serve as a director or division head, the above provisions apply for a period of one year after they leave EgyptERA. For the board members, this period is extended to two years. Moreover, under Law 106/2013, there are general provisions for the prohibition of conflict of interests for the high-level decision makers in the government; however, there are no specific provisions for the energy sector yet.

b. Financial independence

EgyptERA is financed through license fees and has the power to set sector participant fees to meet its budgetary needs. All of EgyptERA's funds are deposited with the unified treasury account of the Central Bank of Egypt, provided that EgyptERA keeps 25% of the annually realised surplus and carry some forward from one year to the next. The budget process is established by legislation, and the parliament must approve the budget. The Ministry of Finance must approve the manner in which EgyptERA's resources are used. Annual audits of the budget are conducted by the government's central auditing agency.

Regarding HR, there are clear recruitment procedures determined by the law regarding civil servants that are applicable to EgyptERA. It can 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; however, consultation with the Ministry of Finance is still required. EgyptERA does not own its premises. Its offices are seated in three rented floors in a building owned by a governmental body.

c. Functional independence

EgyptERA executes its powers, tasks and competences through decisions, regulatory decisions and the imposition of penalties and administrative sanctions on the supervised entities. Nevertheless, there is a mechanism in place that allows parties to appeal a regulatory decision in the administrative court. However, EgyptERA's decision remains in effect pending the appeal's decision. Furthermore, within three months from the expiry date of the fiscal year, EgyptERA submits to the prime minister an annual report of its activities performed during the year and the developments achieved in the electricity market.

5.6.3 Competences

EgyptERA has the mission to regulate the Egyptian electricity market in a transparent and non-discriminatory manner while considering

Table 7. EgyptERA's formal obligations for approval

Obligations	Government	Parliament
Tariff methodology	X	
Opinions on issues of supply security		X
National development plans		
Draft budget	X	X
Annual work plan	X	
Annual activities report	X	

environmental measures and ensuring the availability, reliability and quality of supply at fair prices.

a. Access to information

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

b. Security and quality of supply

EgyptERA monitors the (i) medium- and long-term supply/demand balance in the national market, (ii) quality and level of maintenance of the networks and (iii) quality of supply. Furthermore, it participates in the implementation of measures to cover peak demand and is entrusted to address any shortfalls from one or more suppliers.

c. Market opening and market monitoring

Based on the legislation, there are national timetables regarding the full opening of the electricity market. According to these timetables, three years will be needed for restructuring the Egyptian Electricity Transmission Company (EETC) and eight years will be needed for the Egyptian Electricity Holding Company (EEHC) to adjust to those changes. EgyptERA is not only responsible for setting the market design in cooperation with the Ministry of Electricity and Renewable Energy but also for market monitoring; this includes collecting information on market dominance as well as predatory and anti-competitive behaviour in collaboration with the antitrust authority. EgyptERA is entitled to approve market rules and to launch reparatory measures and amendments when required. As the liberalisation process has just started, the market monitoring activity is currently mainly devoted to assessing the existence of the conditions required for market opening, with particular reference to competition on the supply side of the market. For its specific task, which entails the shift from a vertically integrated monopoly to competition, EgyptERA is being assisted by the above Twinning Project. EgyptERA also observes the compliance of the licensees to the terms and conditions of their licences.

d. Tariff setting

The tariff methodologies – including both

transmission and distribution network tariffs, end-user tariffs for domestic customers and tariffs for renewable energy sources installations – are set by EgyptERA and approved by the Cabinet of Ministers. The approval of tariffs is divided into two phases. First, the Cabinet of Ministers approves the tariff methodology. Then EgyptERA autonomously performs the calculation of tariffs. Law 87/2015 does not include the provisions and respective competences for EgyptERA's approval and adoption of cross-border capacity allocation rules.

Under Law 87/2015, especially regarding the 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 should pay the difference between the two tariffs to the licensees; this is in accordance with the rules and procedures set forth in the executive regulations, executed by the provisions of the aforementioned law. Vulnerable consumers are subsidised under a progressive tariff structure, i.e. low-consumption consumers pay proportionally less than high-consumption consumers.

e. Licensing

Under Law 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 Twinning Project mentioned above, the licensing regulation and procedures were developed regarding the generation (conventional plants, RES, cogeneration), distribution and supply activities. The average time to deliver a license is 60 days, starting from the date of application.

f. Dispute settlement

EgyptERA is responsible for settling disputes between industry actors as well as between industry actors and consumers. It also resolves grid access and TPA complaints.

g. Unbundling

The unbundling regime is set out by the Electricity Law, and each utility is tasked with implementing it. EgyptERA is involved in the different phases of

the unbundling process, from designing to the ex-post monitoring of the process.

h. Technical competences

EgyptERA has the power to issue secondary legislation, including market rules, grid codes and other technical rules and to define metering rules and charges. It can set incentive regulation, support the development of RES and promote energy efficiency measures. Moreover, it has the power to set, approve or provide an opinion on the standards of service quality and intervene if they are violated.

i. Consumer protection

Electricity consumer protection is mainly performed through a complaint management system; it involves setting and developing the required regulations. In particular, regarding 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 (such as website, social media and mass communication channels) to promote awareness campaigns. The Consumer Protection Agency may be considered to be indirectly involved in the making of EgyptERA, as the board consists, among others, of the chairmen of consumer organisations' representatives, especially the Consumer Protection Agency. Regarding vulnerable consumers, EgyptERA defines policies to support them, such as specific tariffs; this is also in cooperation with the Ministry of Social Solidarity.

Articles 35-40 of 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 EU best practices, to further the implementation of the proposal of a dispute resolution procedure that has been prepared by virtue of the aforementioned Twinning Project. Nevertheless, consumers and other stakeholders should be involved in all phases of the decision-making process through public consultations on draft documents.

5.6.4 Internal organisation

The main structural scheme of EgyptERA's organisation of, as provided by Law 87/2015, is decided by its board of directors. Recruitment procedures are performed by EgyptERA according to the internal by-laws; a public notice is issued, and entrance exams and interviews are conducted. The internal mobility that EgyptERA offers to its employees is also a valuable indicator of a good level of HR management and may support the professional and personnel development of the staff members, whose cross-cutting experiences enrich their skills.

The salaries of the board members are on a similar level as those of civil servants, government officials and industry officers; they are set by the prime minister according to the law. The salaries of the staff members are established according to the competitive rates in the sector.

EgyptERA does not currently have a code of conduct for its staff and instead relies on generic principles of work ethics. These principles are enforced through EgyptERA's legal affairs department, which investigates employees in case of rule violations. The results are presented to the board of directors so they can deliberate and decide on the potential measures to be applied.

EgyptERA has 86 staff members: one chairman, five top management officials, 16 engineers, 13 economists, four legal officers and 47 administrative (communication, IT, HR, secretariat) staff.

Apart from MEDREG, EgyptERA is involved in associations such as RARESA and AERF.

5.6.5 Enforcement

EgyptERA, under Law 87/2015, is empowered to enforce its decisions and regulatory measures as well as impose sanctions on the supervised entities, especially the licensees, if they do not comply with its decisions. There are two different procedures for this:

- Imposing any of the penalties stated in the law if legal provisions, competition rules or the principles of transparency and equal opportunity are violated.

- Imposing sanctions if EgyptERA's provisions are violated or if the supervised entity is prejudiced towards any of the generation plants or tampers with them. These sanctions range from fines to aggravated imprisonment depending on the gravity of the acts.

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

5.6.6 Transparency and accountability

EgyptERA is responsible for disseminating information, reports and recommendations to help the actors of the electricity sector and customers know and understand their rights and duties. It also has to explain the nature of its role in the electricity sector in a fully transparent way. Information about EgyptERA is available on its website, covering its internal organisation, missions, duties and reports. EgyptERA uses different communication tools, such as its website, newsletters, annual reports, awareness flyers, publications and press releases, social media and smart service programmes (such as mobile applications and text messages).

Even though Law 87/2015 does not provide for a compulsory consultation process, EgyptERA uses various tools to consult stakeholders. These include public hearings (organised only by the licence department), written consultations, workshops and meetings with the service providers, electricity stakeholders and consumer associations. Within the framework of the aforementioned Twinning Project, a manual for public hearing and public consultation procedures was developed; it was then adopted by the board of directors and is already in force.

Furthermore, to appropriately communicate the fulfilment of its duties and the results of its actions, EgyptERA publishes its annual report on its website; it also publishes detailed information on the new regulations and rules it has drafted. Prior to its publication, the annual report is approved by the board of directors.

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 ASA's auditing are published on EgyptERA's website along with its annual report. The decisions of EgyptERA are reasoned and may allow judicial review, which includes the ability for third parties to appeal against those decisions. Such decisions are also published on its website.

Moreover, no established procedure exists for the regular, be it formal or informal, reporting of EgyptERA to the parliament. The chairman (i.e. the Minister of Electricity and Renewable Resources) reports on a yearly basis to the Energy Committee in the parliament about several issues, including EgyptERA's annual work plan and budget. EgyptERA's executive chairman reports to the Court of Auditors.

5.7 GasReg (Egypt)

The Gas Regulatory Authority of Egypt (GasReg) is an independent public body established by virtue of Law No. 196/2017 for the "regulation of gas market activities". GasReg is established with the objective of monitoring the functioning of the gas market, encouraging new investments, regulating the gas market activities, introducing competition amongst potential market players by allowing TPA to gas networks and availing facilities under a fair and non-discriminatory basis. It also aims to increase the quality of the services provided and protect consumer rights.

5.7.1 Independence

a. Political and legal independence

GasReg is distinct and functionally independent from other public and private entities. However, being a governmental entity, it complies with the rules applicable to all governmental entities.

GasReg is managed by a board of directors that is headed by the competent minister and composed of the following members:

- the chief executive officer (CEO) of GasReg, who is selected from the petroleum sector;

- three members representing entities from the petroleum sector that carry out gas market activities;
- the chairman of the Egyptian competition authority or someone nominated by them;
- two independent members, other than gas market parties, with expertise in the technical, economic or legal fields or from civil society organisations; and
- the chairman of the Federation of Egyptian Industries or someone nominated by them.

The CEO of GasReg is appointed for a period of three years by a decree of the prime minister based on a nomination made by the competent minister. The board members are appointed for a term of three years, with the possibility of one reappointment.

The board members should abstain from deliberating or voting on any matters in case of any conflict of personal interest, and in such cases, the member is required to disclose and clarify the conflict to the board.

GasReg submits periodical activity reports to the parliament.

b. Financial independence

Pursuant to Law No. 196/ 2017, the financial resources of GasReg consist of the following: any amount allocated from the state general budget to GasReg, license fees, grants and donations and any

amount collected from the activities and services performed by GasReg. Its budget is subject to approval by the parliament. The budget is audited by the ASA.

c. Functional independence

The decisions of GasReg can be appealed in the administrative court. Pending the outcome of the procedure, the appealed decision remains in effect.

5.7.2 Competences

a. Access to information

GasReg has access to the financial and operational details as well as the technical information of the sector participants.

b. Security and quality of supply

GasReg has the power to institute and engage in policies, strategies and market design aspects in the form of regulatory measures and procedures to assure the security of supply. Moreover, GasReg monitors the (i) expected future demand and envisaged additional capacity, (ii) quality and level of readiness for effective, secure and efficient O&M of the regulated infrastructure and (iii) quality of supply. Moreover, it participates in the implementation of measures to cover peak demand and address any shortfalls of one or more suppliers through SoLR. GasReg can also impose regulations to approve the investment plan and monitor its implementation.

Table 8. GasReg's formal obligations for approval

Obligations	Government	Parliament
Tariff methodology		
Opinions on issues of supply security		
National development plans		
Draft budget	X	X
Annual work plan		

c. Market opening and market monitoring

Pursuant to Law No. 196/2017, the gas market activities should be practiced in a framework of free competition, where eligible consumers are entitled to choose their own supplier and where gas market participants are treated without discrimination in order to avoid any monopolistic practices as stipulated in the provisions of the executive regulations. Gas regulation aims to avail gas in the domestic market through economic and effective measures as well as to ensure TPA to the gas facilities without discrimination between the gas market parties who are granted such access pursuant to this law. Currently, GasReg is in the process of developing and submitting the gas market design for approval from the cabinet in order to facilitate the next phase. Moreover, GasReg plays a role in prohibiting abusive and monopolistic practices that affect wholesale energy markets as well as in detecting and investigating market manipulation practices.

d. Tariff setting

GasReg sets and approves the methodologies used to establish transmission and distribution network tariffs. The cross-border infrastructures and connection fees will apply in the following regulatory phase.

GasReg has the power to require TSOs and DSOs to modify terms and conditions, tariffs, rules, mechanisms and methodologies to ensure they are cost reflective and applied in a non-discriminatory manner.

e. Licensing

GasReg can issue and modify licenses, determine their terms and conditions and review and monitor compliance with the terms and conditions. Therefore, GasReg can impose a sanction on licensees for violations of the terms and conditions. The average time to deliver a license is two months starting from the date of application.

f. Handling complaints

GasReg is responsible for handling complaints from the industry and customers as well as disputes between industry operators. It manages complaints on grid access, TPA, contracts, license conditions and payment obligations.

g. Unbundling

GasReg is responsible for setting gas market activities unbundling rules that apply to the gas market participants to ensure fair competition. GasReg evaluates the unbundling process while considering the interests of all gas market participants. It does this in compliance with law for competition and the prevention of monopolistic practices. GasReg must also draw up guidelines for compliance review as well as for reporting obligations regarding the unbundling process.

h. Technical competences

GasReg has the power to (i) issue regulations, including market rules, grid codes and other such technical rules and guidelines, (ii) define metering rules and charges, (iii) approve operational and planning standards, including schemes for the calculation of total transfer capacity, (iv) require the transmission and distribution operators to correct any congestion difficulties, (v) set incentive regulation and (vi) promote energy efficiency measures. GasReg can set and approve both standards for service quality and congestion management rules. Moreover, GasReg has the power to enforce sanctions in case of violation by applying the network code provisions. With respect to investment planning and cost recovery, GasReg has a responsibility to review and approve development plans.

i. Consumer protection

The aims of establishing GasReg include protecting consumer rights, instituting the standard contractual terms and conditions for the supply contract, ensuring the tariffs are fair, transparent and non-discriminatory and ensuring all consumers can access gas networks.

5.7.3 Internal organisation

GasReg approves its organisational structure, the financial, technical and administrative internal regulations, the HR regulations and any other internal regulations with respect to the GasReg internal work procedures. In this, GasReg is not restricted by the provisions of the civil services code or other governmental rules and regulations.

A decree issued by the prime minister specifies

the remuneration and attendance incentives for all members of the board of directors. The salaries for the board and staff members are similar to those of civil servants, government officials and industry officers. There is no legal restriction on the number of GasReg's staff members. All employees are bound by an ethics code approved by the board. Currently, GasReg has 100 staff members. Its latest approved budget corresponded to 1.78 million euros, 20% of which is devoted to employees' salaries and 10% to IT.

Apart from MEDREG, GasReg is involved in associations such as ERRA and EC.

5.7.4 Enforcement

GasReg has the power to sanction the sector participants through specific legal procedures. GasReg's enforcement mechanisms may include the suspension of professional activities.

5.7.5 Transparency and accountability

GasReg's official website contains updated information about its mission, duties, organisation chart and the reports available to the stakeholders. The English version of the website is also available.

GasReg employs several consultation tools. These include public hearings, written consultation, workshops as well as discussions and debates in purposely formed focus groups/stakeholder groups. For certain decisions (such as a consultation for the network code), GasReg consults its draft decisions before the final approval and may organise a public consultation. GasReg issues an annual report and has reporting obligations towards the parliament.

The board decisions are taken by majority vote, and in case the votes are equal, the chairman's vote is decisive.

5.8 CRE (France)

5.8.1 Legal status

The French regulator, the Commission de Régulation de l'Énergie (CRE), is an independent administrative authority that was established on March 24, 2000¹⁴, following the adoption of Law No. 2000-108. This

¹⁴ Article L. 131-1 and s. of the French energy code

law was the first step towards liberalising the energy market following the "first package" of the EU Directives. CRE became operational immediately after its establishment. Its role was shaped by the European framework, and its powers were rapidly extended to the gas market by the law of January 3, 2003 on the gas and electricity markets and the public energy service. In the beginning, the regulator was known as the Commission de régulation de l'électricité, but the rapid extension of its prerogatives justified the transformation into Commission de régulation de l'énergie. From the beginning, the key missions of CRE were to regulate the open market and to regulate the electricity and gas networks. However, CRE was eventually given additional missions, such as the organisation of tendering procedures for RES capacity, and long-term goals (through a national energy strategy, for instance). In these cases, French Ministry of Economy and/or the Ministry of Sustainable Development may get involved in the regulatory decision-making process. However, the ministries do not have a veto power and cannot overturn CRE's decisions.

5.8.2 Independence

a. Political and legal independence

CRE is distinct and functionally independent from any other public or private entity. It is autonomous from direct instructions from the government and other public and private entities. Article L. 133-6 of the "code de l'énergie" (Energy Code), as modified by Law 55 of January 20, 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".

CRE's decisions and functions are carried out by its board (college). The college comprises five members and the president. The members and president are selected following an open call for candidates. The selection is done based on the selection criteria outlined above. The candidates are heard in the parliament.

- The president is appointed by a decree¹⁵ of the President of the French Republic.

¹⁵ Organic Law No. 2010-837 of 23 July 2010 relating to the application of the fifth paragraph of Article 13 of the Constitution.

- One member is appointed by the president of the National Assembly based on their legal, economic or technical qualifications in the field of personal data protection.
- A second member is appointed by the president of the Senate based on their legal, economic or technical qualifications in the field of local public energy services.
- A third member is appointed by decree based on their legal, economic or technical qualifications in the fields of energy consumer protection and energy poverty.
- A fourth member is also appointed by decree based on their legal, economic or technical qualifications in the fields of energy demand management and renewable energies.
- Finally, the fifth member is also appointed by decree; they are selected upon the proposal of the minister responsible for overseas territories based on their knowledge and experience of non-interconnected areas.

The composition of the college respects parity between women and men. The college members and the president are appointed for six years. Their mandate is non-renewable. The members and staff of the commission are bound by professional secrecy for the acts and information that they may have become aware of as part of their roles in CRE. The 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, ACER or an EU member state authority with 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 as well as with the direct or indirect holding of interests in an energy company. In accordance with the terms and conditions laid down by a decree of the Conseil d'Etat, the college, except for its president, is renewed by half every three years.

CRE's deontology charter, adopted by a board decision on December 7, 2017, applies to its staff members. According to Article 1, the staff members should carry out their duties in full compliance with the provisions of impartiality, without receiving instructions from the government or any institution, person, enterprise or organisation. They are freely determined, without bias of any kind or any desire to favour a particular party or particular interest and without yielding to any pressure. They should strive to prevent any legitimate doubt in this respect and to preserve the confidence of the players in all sectors and the public in the independence of CRE.

They should ensure that their professional and private relationships do not create a suspicion of bias or make them vulnerable to influence. They also should not violate the dignity of their office. They should not place themselves or allow themselves to be placed in a position that may require them to grant in return a favour to any person or entity.

Pursuant to Article 6 of Law No. 2017-55, dated January 20, 2017, the president and board members of CRE cannot be dismissed. The only exception is when three quarters of the board members (excluding the person concerned) consider a member to have seriously breached their legal obligations or be afflicted with a definitive incapacity that prevents them from fulfilling the rest of their mandate. A formal process must be conducted; the person concerned is asked to produce their observations within a period that cannot be less than one week. The voting takes place by secret ballot (in the absence of the person concerned).

The board members are prohibited from taking a job or holding an interest in any company in the energy sector until the expiry of a period of three years following the end of their mandate (Article L132-2 of the French Energy Code). This prohibition is broader and applies for a longer period than in other countries. Former board members do not receive any compensation during this cooling-off period. In practice, this may discourage candidates with experience in the industry from applying to CRE except at the end of their career. This is reflected in the

current age distribution of board members (four between 55 and 69 years). If a board member violates these rules, a criminal sanction of three years' imprisonment and a fine of 200,000 euros (the amount of which may be increased) may be pronounced.

Internal regulations for safeguarding independence also apply to the staff members. The cooling-off period restrictions may also apply to the staff members. The applicability (and duration) of the cooling-off period is defined on a case-by-case basis. The decisions consider the position of the employee in CRE (such as their access to sensitive data) as well as the duties and tasks related to their new position. These cases are referred to the National Deontology Commission.

The table below summarises the formal obligations of CRE vis-à-vis the government and the parliament.

a. 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. Pursuant to Article L133-5 of the French Energy Code, CRE submits its proposals related to its necessary credits and resources to the minister in charge of energy and to the minister in charge of finance (who is responsible for the preparation of draft finance bills). CRE's budget is negotiated as a part of a budgetary program implemented by three divisions of the Ministry of the Economy and

Finance (and covering the appropriations of the telecom regulator and the competition authority in addition to that of the energy regulator). The budget is approved by the parliament based on the proposal of this ministry. No other governmental body is involved in the use of CRE's resources.

CRE's budget is submitted to the control of the Court of Audit. According to the French law, the power to authorise expenditures lies with CRE's president, and CRE is not subject to any ex ante restriction for the use of its resources.

b. Functional independence

CRE's decisions can be overturned by a court: the Council of State for regulatory and sanction decisions, the Court of Appeals of Paris for dispute resolution decisions and the administrative tribunal of Paris for non-regulatory decisions.

5.8.3 Competences

a. Access to information

CRE has full access to the financial and technical information of the sector participants. Article 134-18 of the French Energy Code explicitly specifies that in order to carry out the tasks entrusted to it, CRE collects all the necessary information from (i) the ministries responsible for the economy, environment and energy, (ii) the transmission and distribution operators of electricity and gas and the operators of LNG facilities, (iii) end-user

Table 9. CRE's formal obligations for approval

Obligations	Government	Parliament
Draft budget	X	
Annual activities report		X

suppliers benefiting from regulated access, (iv) nuclear plants, (v) the operators of transport networks and the operators of geological storage of carbon dioxide and (vi) other undertakings involved in the electricity and natural gas markets. The law further specifies that CRE may also gather data from any person considered likely to contribute to the collection of necessary information.

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

In addition, in case of non-compliance, the president of CRE should issue a formal notice to comply with the information request pursuant to Article L. 134-30 of the French Energy Code. Should the infringement persist, financial sanctions can be imposed pursuant to Article L. 134-27 of the French Energy Code (3% of the total revenue before taxes; 5% in case of repeated offence).

To ensure the protection of confidential information, the board and staff members of CRE are bound by professional secrecy with regard to the acts and information they encounter during the fulfilment of their duties.

b. Security and quality of supply

CRE 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 this tendering process.

In this context, CRE ensures the preparation of the scope statement and the tally of the offers, and it issues an opinion on the candidates, while the minister decides on the candidate(s) to retain (Article L. 311-10 of the Energy Code).

More specific, sector-wise details are given below: In the electricity sector, the operator of the public

transmission system should, at all times, ensure the balance of electricity flows in the system and the safety, security and efficiency of the system, taking into account the technical constraints on the system. It should also ensure compliance with the rules relating to the interconnection of different national electricity transmission systems. However, the rules for the submission of adjustment programmes and proposals submitted to the public TSO on the balancing mechanism must be approved by CRE prior to their implementation.

In the gas sector, Article L. 452-3 of the Energy Code allows CRE to put in place “appropriate short- or long-term incentives to encourage operators to improve their performance linked in particular [...] to the integration of the internal gas market, security of supply [...]”. In its deliberation of February 22, 2018, CRE set the terms and conditions for the marketing of gas storage capacities for the year 2018–2019. The primary objective pursued by CRE in the context of the storage reform has been to maximise capacity subscriptions in order to improve the filling of storage facilities, which has reached particularly low levels in the previous years, and thus improve supply security.

In both sectors, CRE promotes interconnections with neighbouring countries and monitors their efficient operation because they contribute to the supply security of Europe. CRE does not participate in short-term measures to cover peak demand and address the shortfalls of one or more suppliers. CRE is the fully competent authority regarding the quality and level of maintenance of the networks as well as the 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 the competence of monitoring the wholesale electricity and natural gas markets; in particular, it has to ensure that the offers made by the market players are consistent with their economic and technical constraints. The aim is to ensure that the prices are consistent with the physical and economic fundamentals that determine supply and demand. CRE’s task of monitoring wholesale markets is also part of

the framework set by REMIT, which prohibits market abuses in the 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 of the functioning of the wholesale markets. This annual report has been published since 2007. It analyses the activities in the wholesale gas and electricity markets and reports on the 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 antitrust authority and other regulatory authorities regarding cross-border issues.

d. Tariff setting

CRE sets the methodology and levels of the transmission and distribution tariffs. It also sets the methodology for the provision of balancing and ancillary services and is involved in setting connection fees. CRE sets the conditions for access and connection to the public networks of the new interconnections mentioned in Article 17 of Regulation (EC) No 714/2009 of the European Parliament and of the Council of July 13, 2009 on conditions for access to the network for cross-border exchanges in electricity. As part of its ex-ante approval process, the decisions of CRE detail the evaluation of the data and methodologies. They are public, detailed and published in the Official Journal of the French Republic. Pursuant to the provisions of Article L. 341-3 of the Energy Code, CRE has to give its opinion on the changes in the tariffs for the use of the public electricity transmission and distribution networks and may provide for a framework for multi-year tariff evolution. Pursuant to Article L337-4 of the Energy Code, CRE issues a recommendation on selling the regulated tariffs for electricity. Performance-based components can be included in the tariff methodology.

CRE issues an opinion for fixing the purchase conditions of the energy produced by small facilities, for the recovery of household waste or for using renewable energy (obligation given

to EDF and non-nationalised distributors to purchase energy produced by these producers) (Article L. 314-4 of the Energy Code).

CRE also determines the following:

- The method for calculating the production costs of historical nuclear electricity and the rules for calculating and adjusting suppliers' rights to regulated access to historical nuclear electricity (Article L134-1 and Article L452-2 of the Energy Code for electricity and gas, respectively).
- The methods used to establish the tariffs for the ancillary services provided exclusively by the operators of these networks (Article L341-3 of the Energy Code).

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

e. Licensing

There is no licensing in France.

f. Dispute settlement

CRE's CoRDIS was created by law in 2006, but its activities were previously managed by CRE's college. The committee executes CRE competences with regard to sanctions and settles disputes related to the access and use of public electricity grids and natural gas networks.

CoRDIS 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 the board members (except for serious misconduct). Pursuant to Article L. 134-19 of the French Energy Code, CoRDIS can intervene 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 and (iii) operators and carbon dioxide transmission and geological storage facility users. CRE does not have the power to act as an arbitration authority for any party except these entities.

g. Unbundling

CRE has an active role related to unbundling. It has the power to mandate changes in accounting practices if it determines that the sector participants are not sufficiently unbundled. It can also establish rules regarding the allocation of costs resulting from the unbundling process.

Until recently, CRE used to establish guidelines on how separate accounts should be drawn as well as guidelines for compliance review and reporting obligations regarding the unbundling process. It does not do this anymore as the unbundling process has been achieved in France. Under the Third European Energy Package, CRE has also been entrusted with the certification of electricity and gas TSOs. On January 26, 2012, CRE certified RTE and GRDF as independent TSOs of the vertically integrated company (ITO – independent transmission operator model). However, CRE regularly ensures that the TSOs comply with their obligations in terms of independence. To this end, CRE verifies that the operator fulfils its commitments, which have been recalled in the certification deliberations, and that it takes, within the set deadlines, the measures defined by CRE in these same deliberations.

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 TSO or DSO (Articles L 111-30 and L 111-66 of the Energy Code);

- publishes an annual report regarding the compliance of TSOs and DSOs with their codes of conduct (Article L. 134-15 Energy Code);
- issues decisions specifying the conditions for carrying out the missions entrusted to TSOs and DSOs (Article L. 321-2 of the Energy Code);
- approves, after consultation with the competition authority, the accounting rules for the separation of activities between (i) the production, transmission and distribution of electricity and the other activities of the operators involved with electricity and (ii) the transport, distribution and storage of natural gas as well as installation operators of LNG and the other activities of operators involved with natural gas (Article L. 111-86 and Article L. 111-89 of the Energy Code);
- serves a monitoring and surveillance role embodied by the possible exercise of its powers to investigate and sanction (to verify the correct application of principles of separation so as to prevent cross-subsidisation, discrimination or restriction of competition) (Article L. 134-18 and L 134-25 to Articles L 134-34 of the Energy Code);
- identifies and acts to limit the abuse of positions and the practices that impede the free exercise of competition. The competition authority will notify CRE of any referral within the scope of its competency, and it may ask for CRE's opinion on any matter relating to the electricity or natural gas sectors (Article L. 134-16 of the Energy Code); and
- approves, prior to their implementation in the electricity sector, the rules for the submission of adjustment proposals and programmes as well as the criteria for choosing between the proposals submitted to the public TSO (Article L. 321-14 of the Energy Code).

Every two years, CRE publishes a report on the compliance of system operators with the codes of conduct and independence (RCBCI report). This is intended to be a report on the network operators' compliance with their obligations under their codes of conduct and independence, which are derived from the Energy Code. In the interest of continuous improvement, the RCBCI report communicates on

the progress made by the system operators and makes recommendations. In 2019, CRE issued the eleventh edition of the RCBCI.

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 TPA for new investment;
- set incentive regulation; and
- support the development of RES.

CRE also has the power to set, approve or provide an opinion on the standards of service quality and congestion management rules and standards. CRE maintains an audited account of any revenues collected pursuant to congestion management mechanisms. Regarding the quality of service, CRE has the power to sanction or intervene when the standards are violated. CRE has defined a reference objective for each quality indicator that is subject to a financial incentive; below this a reference objective, the operator will pay a penalty, and above it, the operator will receive a bonus. With respect to investment planning and cost recovery, CRE approves development plans.

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 a website 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.

CRE does not have the direct power to address the needs of vulnerable consumers. Such issues remain primarily within the scope of the parliament and government. However, CRE issues opinions concerning the rate mechanism for social purposes designed to guarantee the right of people in precarious situations to have electricity (according to Articles L. 121-5 and L. 337-2 of the Energy Code). CRE also issues opinions on the special solidarity rate for the supply of natural gas as well as services related to it, applicable to residential customers who qualify for the special "staple product" pricing referred to in Article 4 of Law No. 2000-108, dated February 10, 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 Energy Code. To the energy minister, CRE proposes the amount of public service charges and the amount of the contribution applicable to each kilowatt-hour. To the energy and economy ministers, it proposes the amount of repayments made to the operators supporting public service charges (Article L. 121-13 of the Energy Code).

5.8.4 Internal organisation

CRE decides on its internal organisation and HR policy (hiring and firing staff, 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. No written entrance exams occur. 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. Around 10% of CRE's staff are civil servants. However, once integrated into CRE, the same conditions apply to every member of the staff.

The salaries of the board members are established by several 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 the salaries of government employees and lower than those of top management officials in the energy industry. The salaries of the staff members are set according to the professional experience and 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 of employees in the energy industry. The number of CRE staff members is annually enshrined in the Finance Act. In 2019, CRE had 150 staff members (excluding board members). The allocation of staff per department is as follows:

- Cabinet | 2
- Institutional relations | 2
- Communication | 3
- HR | 5
- Support teams | 11
- CSPE team | 3
- General directorate | 2
- Foresight committee | 3
- Legal team | 20
- Networks directorate | 43
- Energy transition and retail market team | 27
- Wholesale market | 10
- Financial division | 5
- International team | 5
- Assistants | 9

CRE's staff is bound by CRE's deontology charter, which was adopted by the board's decision on December 07, 2017. It is published at the Official Journal of the French Republic. The latest annual budget for the regulatory authority was 20.9 million Euros, 79% of which is devoted to salaries.

At the European level, CRE is member of CEER and actively participates in the board of regulators of ACER. CRE is also very engaged in RegulaE.fr (a French-speaking network of energy regulators) and recently joined ERRA (as an associated member).

5.8.5 Enforcement

CRE has the power to sanction the sector participants, and it may publish comparative reports demonstrating insufficient performance by the network operators. It has the power to require TSOs and DSOs, if necessary, to modify terms and conditions, including tariffs or methodologies, but not for sanctioning purposes. Regarding investigatory and sanctioning powers, investigations are conducted by CRE staff who are appointed by its president. At the end of the investigation, if the investigator believes a breach has been committed, they will draft a report to be sent to the person being investigated and to the president. The president can decide to close the case or to bring it to 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 CoRDIS, its president appoints one of its members to act as a prosecutor. Where appropriate, this member can issue a formal notice to comply and/or a notice of prosecution. Finally, the CoRDIS judges deliberate to make a decision (the investigator and the member in charge of prosecution abstain from taking part in the deliberations).

CoRDIS can impose sanctions in the event of a breach of European or national law regarding network access rules, independence requirements for TSOs and DSOs and insider trading or market manipulations. CoRDIS enforcement mechanisms may include temporary prohibition of network access, temporary prohibition of professional activities or the imposition of financial penalties. To avoid deadlock in regulatory board decisions, CRE's president has a preponderant vote.

For instance, on October 5, 2018, CoRDIS imposed a fine of five million euros on Vitol SA for market manipulation at the gas exchange point (PEG Sud between June 1, 2013 and March 31, 2014). This sanction, the first CoRDIS sanction concerning the

monitoring of wholesale energy markets, followed the investigation opened in April 2014 by CRE and its chairman's referral to CoRDiS in December 2016.

5.8.6 Transparency and accountability

Information about CRE (its missions, duties, organisation chart, reports) and all sorts of regulatory issues and practices, such as tariffs and market monitoring data (except confidential data), is published through its website. All of its decisions are made public, and the most important ones are also translated into English. Pursuant to Article 7 of CRE's internal rules of procedure, "Unless the College decides otherwise, the deliberations adopted by the College of the Commission should be made public, subject to the secrets protected by law".

For certain decisions (such as tariff setting), there is a clear obligation (i.e. written in law) to organise a public consultation. For other tasks, CRE may organise a consultation, even if it is not a binding procedure. There are several consultation tools employed. These include public hearings, written consultations, workshops, discussions and debates in purposely formed focus groups/stakeholder groups.

Based on Article R134-5 of the Energy Code, every year before June 30, CRE issues a public report of its activity and the implementation of its legislative and regulatory measures that are related to (i) regulated access to historical nuclear power, (ii) the monitoring of retail and wholesale markets, (iii) access to public electricity transmission and distribution systems, (iv) natural gas transmission and distribution and (v) LNG installations and their use. This report also evaluates the effects of CRE's decisions on the development of competition; the situation of residential, professional and industrial consumers; the conditions of access to these networks, works and installations and the execution of public service missions in the electricity and natural gas sectors. This report is addressed to the government, parliament and the Higher Energy Council. The suggestions and proposals of the latter are conveyed to the energy minister and the Energy Regulatory Commission. In addition, under Article 59 of Directive (EU) 2019/944, dated June 5, 2019 – concerning the common rules for the internal electricity market

and amending Directive 2012/27/EU – CRE is required to submit an annual report of its activities and performance, particularly to the commission and ACER (generally in July).

In October 2017, CRE established a Foresight Committee (Comité de prospective). CRE has indeed invited energy industry stakeholders to come together and adopt a collective approach to two key challenges: ensuring the success of the energy transition and capitalising on the digital revolution to benefit all electricity and gas consumers. This multi-disciplinary forum for discussion and analysis aims to provide the benefit of its expertise to CRE, the operators and stakeholders in the sector, the government and the consumers in order to help them gauge current changes and their implications for the energy sector and wider society.

5.9 RAE (Greece)

5.9.1 Legal status

The Regulatory Authority for Energy (RAE) is an independent administrative body that is currently responsible for regulating, monitoring and supervising the Greek energy market; it functions in 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). This was amended for harmonising 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. These were later repealed and replaced by Directives 2003/54/EC and 2003/55/EC.

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), which was amended to incorporate the Directives 2009/72/EC and 2009/73/EC for the liberalisation of the electricity market, further enhanced RAE's competences and modified the provisions regarding its administrative and financial independence, the composition of the board, the legal status of the board members and operational procedures.

5.9.2 Independence

a. Political and legal independence

RAE's board members are senior officers of the state who enjoy full personal and operational independence in the exercise of their duties and are not subject to scrutiny or supervision from the government or other administrative bodies. The RAE board comprises seven members, including the chairperson and two vice chairpersons, who are distinguished for their scientific training and professional aptitude, have specialist experience in matters for which RAE is competent and provide guarantees of independence and impartiality. They are selected through an open procedure for a five-year term of office, and they may not serve more than two terms of office. The board members of RAE can be relieved of their duties during their term of office only in cases of non-compliance with the relevant clauses of L. 4001/2011.

The president and the two vice chairpersons are appointed by the Council of Ministers, while the other board members are appointed by the Minister for Energy and Environment. These appointments follow a positive opinion from the Special Permanent 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. They should act independently of any economic interest. Specific provisions of L. 4001/2011 clearly foresee that RAE members should neither seek nor accept direct instructions from the government or other administrative bodies or from any other person or agency while exercising their duties and competences.

This independence is safeguarded by the following provisions:

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

- During their period of service, the board members cannot be partners, shareholders, board members, managers, employees or consultants to an undertaking subject to RAE's direct/indirect control or supervision. They are also prohibited from holding stocks or shares such undertakings, with the exception of indirect holdings through equity funds or pension schemes. For these purposes, RAE board members are obliged to file a statement of property interests in accordance with the provisions of Article 1 of L. 3213/2003 (Government Gazette 309A).
- Moreover, for a period of two years after their term of office expires, the board members of RAE may not be partners, shareholders, board members, 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 RAE's direct/indirect control or supervision during the members' term of office. They should bear disciplinary liability for every breach of their obligations pursuant to the current legislation.

b. Financial independence

The financial independence of RAE, which is essential for preserving its independence, was effectively ensured by the provisions of the relevant legislation, under which RAE possesses its own resources. These resources are managed in accordance with 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's 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 the parliament's rules of procedure.

RAE is obliged to draft an annual report of its activities and duties, listing the measures taken and the results achieved for each of its duties and responsibilities. This report should 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 should also be posted on RAE's official website. The report also contains a review of the implementation RAE's budget. RAE owns the premises in Athens where its seat and offices are located.

c. Functional independence

RAE's decisions regarding the individual executive acts of RAE may be challenged before RAE via an application for review, which is an administrative appeal on the merits, within a certain deadline. RAE's decision on this application may further be challenged before the Athens Administrative Court of Appeal. Appeals against the judgments of this court may be challenged before the Council of State. The regulatory decisions of RAE may be challenged before the Council of State at the first and last instance.

5.9.3 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 collecting and processing information from the 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. Moreover, it can 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, according to the specific authorisation granted by the relevant legislation. RAE 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 competences.

c. Security of supply

RAE monitors the security of the energy supply,

especially with regard to the following aspects: (i) the balance between supply and demand in the Greek energy market, (ii) the anticipated future demand, (iii) the anticipated additional electricity and natural gas production, (iv) the transmission and distribution potential already programmed or under construction, (v) the standard and level of maintenance and reliability of transmission systems and distribution systems and (vi) the application of measures to cover the peak demand and conditions on the energy market in terms of the ability to develop new production potential. For these purposes, RAE prepares and publishes a relevant report that considers the regular forecasts made by TSOs and DSOs.

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, the machinery or the plant or the integrity of energy systems are at risk. RAE is the competent authority for the application of the measures required under Regulation (EU) No. 2017/1938 of the European Parliament and of the Council of October 25, 2017, which concerns the measures to safeguard the security of gas supply. This regulation repealed Regulation (EU) No. 994/2010 (OJ L 280).

d. Licensing

Under the current legislation, RAE can grant, amend or revoke licenses for energy-related activities, pursuant to the principles of transparency and equal treatment. This licensing must take into account the specific attributes of the applicants, consumer protection, environmental protection and the need to safeguard healthy competition. RAE also monitors and controls the way the rights granted under such licenses are exercised and the license holders' compliance with their obligations.

e. Development of infrastructures and monitoring of development plans

RAE is competent to review and approve the development plans prepared by the competent TSOs as well as to evaluate the application of development programmes. RAE also monitors the time needed for the TSOs and DSOs 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

To calculate the prices of non-competitive activities, RAE decides on the methodology used 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 and certification of TSOs/compliance officers

RAE decides on the certification of TSOs in accordance with the criteria and procedure set out by the current legislation. It also monitors the implementation of the unbundling regulation and the respective compliance of the TSOs/DSOs.

h. Consumer protection

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

i. Regional cooperation (Agency for the Cooperation of Energy Regulators)

The legislation stipulates that RAE must cooperate with the authorities of other countries, ACER, international organisations and the European Commission.

j. Access to interconnections

RAE adopts, monitors and supervises (i) the application of interconnection access rules, including related prices and the methodology used to calculate them, (ii) capacity allocation and release, (iii) congestion management mechanisms, (iv) the provision of balancing services and (v) the procedure for amicably resolving disputes that arise during the application of the above or any other relevant issues. RAE carries out these duties in cooperation with the competent TSOs and the regulatory authorities in other interconnected states.

k. Consultation

RAE conducts public consultations, which are expressly stipulated under the relevant legislation, especially prior to adopting decisions or regulatory measures that may have important repercussions on the relevant energy market. This gives the interested parties the opportunity to submit their comments on the proposed measures. These consultations are conducted over a reasonable period, and their results as well as RAE's conclusions are posted on its official website.

l. Arbitration

By virtue of L. 4001/2011, a permanent arbitration tribunal was established at RAE, to which the following will be referred to:

- disputes between persons engaged in any manner in the energy sector;
- disputes between eligible customers, as defined herein, and undertakings engaged in energy-related activities; and
- 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.

5.9.4 Internal organisation

Administrative and technical support will be provided to RAE by its secretariat. The secretariat is divided into directorates in accordance with the specific provisions of RAE's rules of procedure. Each directorate is comprised of departments to which the directorate staff is allocated in accordance with the specific provisions of the rules of procedure. The heads of the directorates and departments are selected amongst the staff of the secretariat who satisfy the criteria set out in the rules of procedure and the current legislation. The maximum number of RAE staff as well as certain categories of staff (i.e. lawyers), on either permanent or temporary contracts, is provided by the respective legislation (founding law and other

legislative provisions). Moreover, the procedure for the filling of vacancies in RAE is also provided by specific legislation.

5.9.5 Enforcement

RAE is competent to conduct investigations for detecting infringements of the regulatory framework and impose penalties in case the respective obligations are breached. Moreover, RAE, acting ex officio or pursuant to a complaint, may issue a reasoned decision adopting appropriate interim measures prior to its final decision. These interim measures are immediately enforceable and only open to appeal before the Athens Administrative Court of Appeal in accordance with the provisions of L. 4001/2011. Such appeals cannot prevent the enforcement of the interim measures.

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

The fact that a fine has been imposed cannot prevent other administrative penalties from being imposed under other provisions, especially under L. 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. License withdrawal may be ordered along with a fine.

5.9.6 Transparency and accountability

Through its annual report, RAE presents the performance of its duties under the relevant legislation to the Greek Parliament. RAE's website is currently updated with the existing energy legislation, RAE's internal organisation, its actions and activities on all supervised energy fields and the relevant regulatory decisions.

Moreover, through the public consultations on several issues and proposed measures on the

energy market, RAE gives the interested parties the opportunity to formulate an opinion and submit their comments on the above measures prior to RAE's decisions. RAE also communicates the current developments in the energy sector through conferences, seminars, congresses, workshops, international exhibitions and awareness programmes on RAE's work and competences in the energy sector.

5.10 PUA (Israel)

5.10.1 Legal status

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

5.10.2 Independence

a. Political and legal independence

PUA is an independent authority that is separate from the Ministry of National Infrastructures in terms of its budget and staff. Overall, PUA is only partially independent. Although it is autonomous in the sense that it does not receive direct instructions from government or other public and private entities regarding its regulatory tasks, it operates within the government and ministerial policy. Except for tariff setting, in which PUA is completely autonomous, the ministry may interfere, to a certain extent, in PUA's actions and decisions.

PUA's composition is also determined by the aforementioned law. It is comprised of the following members:

- 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. These positions are often assumed by the general manager of

the Ministry of Natural Resources and the head of the Budget Department of the Ministry of Finance. These two representatives are selected without a public call.

- Two representatives of the public, who must have a degree in economics, accountancy, business management, engineering or another subject related to the electricity sector. They must also have a cumulative experience of at least five years in these 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”. This process is handled by a selection committee.

The chairman’s term of office is fixed at five years, while the term of office of the board members is three years. These mandates can be renewed once. The law provides that a board member or the chairman will cease to serve in one of the following cases: (i) if they resign out of their own initiative by submitting a letter of resignation to the government; (ii) if they are permanently unable to perform their duties, and the government, at the suggestion of

the ministers, dismisses them from their position by written notice; (iii) they are convicted of a crime that, in the opinion of the government’s legal adviser, is one of moral turpitude; (iv) they were appointed from among the general public and subsequently became a civil servant, or they were appointed as a ministry representative and subsequently ceased to be a civil servant; (v) the government has determined, at the suggestion of the ministers and on behalf of PUA, that the member/chairman is not performing their duties in a suitable manner.

Further, if a board member of PUA is absent, without proper reason, from three consecutive board meetings or from more than five meetings in one year, the government may, at the suggestion of the ministers, cancel their appointment. Until now, no chairman or board member of PUA has been removed from their office.

There are formal rules in place that prohibit the board members and staff from having interests (such as shareholding) in the regulated utilities or being political leaders. The law also provides for a cooling-off period. PUA’s board members and staff cannot be engaged with a regulated entity after their service at the regulator.

The table below summarises the formal obligations of PUA vis-à-vis the government.

b. Financial independence

PUA’s budget is part of the national budget and subject to the approval of the government. The budget is subject to constraints arising from

Table 10 . PUA’s formal obligations for approval

Obligations	Government	Parliament
Tariff methodology		
Opinions on issues of supply security		
National development plans	X	
Draft budget	X	
Annual work plan	X	
Annual activities report	X	

the national budget. In practice, the budget requested by PUA has always been approved and provided. Annual audits are internal and subject to governmental control.

c. Functional independence

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

5.10.3 Competences

a. Access to information

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

b. Security and quality of supply

PUA monitors the medium- and long-term supply/demand balance in the national market. It also estimates the 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, PUA participates in the implementation of measures to cover peak demand and addresses any shortfalls from one or more suppliers.

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

c. Market opening and market monitoring

The Israel Electric Corporation (IEC) is the country's sole transmission company and its main distribution company. In the production segment, IEC currently provides 75% of the electricity generated in Israel. By 2025, IEC is expected to lower its share to 45% as part of the unbundling reform set forth by the government in June 2018. The rest of the production

is held by privately owned enterprises. In addition to the reduction in production, the reform stipulated the establishment of an independent system operator (ISO), and the company is currently under construction.

PUA collects information on market dominance as well as on predatory and anti-competitive behaviour. 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 as well as tariffs for the transmission and distribution networks are fixed by PUA. The Electricity Market Law specifies that PUA should 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 if the state budget foresees support for reducing the price of a certain service is it possible to reduce a certain tariff. In such cases, the amount of the support is deduced from the cost of that service.

The law further specifies that before determining tariffs, PUA should review the costs borne by the license holders providing "essential services"¹⁶. PUA, when setting tariffs, may ignore some or all costs that are not necessary (in PUA's opinion) for the essential service provider to comply with its obligations.

PUA has the power to include performance-based components in the tariff methodology (such as applying incentive-based regulation) and can penalise the Israel Electric Corporation for not

¹⁶ According to the Electricity Law, the holder of an essential service provider's license (i) provides a service to the general public reliably and efficiently without discrimination, according to the criteria determined by PUA; (ii) purchases electricity from private electricity producers and provides infrastructure and backup services; (iii) provides backup services to a license holder, at their request, to produce their own electricity; (iv) acts to ensure the provision of all services throughout the term of a license, including the provision of services under the development plan.

performing according to certain standards by introducing a reduced rate of returns. They can 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 TSOs and DSOs to modify terms 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, the 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 for plants firing oil-products that 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 first 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 the terms and conditions of existing licenses. It monitors the compliance of the licensees with these terms and conditions and reports infractions and violations to the ministry. PUA cannot impose fines.

f. Dispute settlement

There is no dispute settlement body established within PUA. It does handle the affected parties' complaints against a TSO or DSO on issues related to grid access, including TPA.

g. Unbundling

PUA has no decision-making role in unbundling. It 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 conduct assessments on whether the

sector participants are sufficiently unbundled; it can also mandate changes in accounting practices. PUA also has the power to draw up guidelines for compliance review and for reporting obligations regarding the unbundling process.

h. Technical competences

According to the Electricity Law, PUA can

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

Within these main functions, PUA can

- 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 the standards of service quality; and
- set congestion management rules/standards.

i. Consumer protection

PUA has some responsibilities over consumer protection, including the power to address the needs of vulnerable consumers, and it works towards the implementation of the related government measures. The Ministry of Natural Resources and the Consumer Protection Agency are also involved in consumer protection.

PUA has mechanisms in place to support customers, including the provision of information

on customer rights and complaint management. Furthermore, it has the power to monitor the time required for new connections and repairs and intervene where necessary. It can also sanction the grid operators that delay connections and repairs.

5.10.4 Internal organisation

PUA can decide on its internal organisation (except for the organisation of the board). It can also decide on its HR policy (hiring and firing staff, staff allocation/ staff composition). Specific selection criteria are in place for hiring staff. The final selection decision is made by PUA's chairman without the involvement of the board members. The terms and conditions of PUA employees are the same as those of civil servants. There is no legal restriction on the number of staff PUA can employ. Currently, it has 69 staff members. The salaries of the board members and staff are established according to the pay-scales of other public officials.

5.10.5 Enforcement

PUA has some enforcing powers (for example, the power to sanction the sector participants for delays in connections and repairs). On the other hand, it cannot sanction license holders for breaching the terms and conditions of their license.

PUA assesses the performance of operators, and it can publish reports demonstrating insufficient performance, revise tariffs or reduce the rates of return. Other enforcement mechanisms it may employ include the temporary prohibition of network access and certain professional activities. Its sanctioning powers and enforcement mechanisms have not been yet employed. As PUA's decision-making body comprises five members (four board members and the chairman), there is no risk of a deadlock.

5.10.6 Transparency and accountability

PUA's decision-making process is well defined, with specific voting procedures and rules. PUA publishes online its decisions and information related to licensing, tariffs and market monitoring data. Rules to protect confidential information are in place. However, this information is not available in English. Rather, it is limited and available mostly in Hebrew. No information on the internal organisation of the authority is available online.

PUA consults the stakeholders regarding draft decisions. This consultation is carried out through public hearings, workshops and discussions within purpose-made groups (focus groups/stakeholder groups) as well as in the form of written consultation. PUA is obliged to issue an annual report that is presented to the parliament. PUA has reporting obligations only to the government. It has a defined communications strategy.

5.11 ARERA (Italy)

5.11.1 Legal status

The Italian Regulatory Authority for Electricity and Gas (AEEG) is an independent body established under Law No. 481 of November 14, 1995 to regulate and control the electricity and gas sectors. This regulator is a public and independent body that 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 No. 214 (December 22, 2011) eliminated the National Agency for Regulation and Supervision on Water and transferred its functions and powers to the Italian regulator, whose name was changed into the Italian Regulatory Authority for Electricity, Gas and Water (AEEGSI); the general principles and objectives of electricity and gas markets regulation are going to be applied to water infrastructures and water services as well.

Legislative Decree No. 102 of July 4, 2014 implemented the European Directive 2012/27/EU on the promotion of energy efficiency in the Italian legislative framework and attributed to AEEGSI specific functions for regulating district heating and cooling. Moreover, Italian Law No. 205 of December 27, 2017 gave the authority regulatory and control functions over the waste cycle, including sorted, urban and related waste. These responsibilities are performed with the same powers and within the scope of the principles, purposes and assignments (including those of a sanctioning nature) provided under Italian Law No. 481/1995. Following the assignment of new competences, the regulator became ARERA, the Italian Regulatory Authority for Energy, Networks and Environment.

ARERA functions with full autonomy and independence of judgment within the general

policy guidelines laid down by the government and parliament while taking into account the relevant EU legislation. In its “Documento di Programmazione Economico-Finanziaria” (Three-year Economic and Financial Planning Document), the government draws ARERA’s attention to any developments concerning the public utilities that would be in the country’s general interest to promote. ARERA formulates observations and recommendations to the government and parliament and presents an annual report of its activities and the state of the regulated services to parliament and the prime minister.

5.11.2 Independence

a. Political and legal independence

ARERA’s board members are selected from highly qualified, experienced professionals in the sector. They are appointed by a decree of the President of the Italian Republic, following nomination by the Council of Ministers based on a proposal by the Minister of Economic Development. The nominations are submitted to the competent parliamentary committees for scrutiny, and the appointment is based on a two-thirds majority vote. The president and the board members remain in office for a non-renewable seven-year term.

To safeguard ARERA’s independence and autonomy, it has adopted a code of conduct for its board members, management and staff. The board members may not (i) carry out, either directly or indirectly, any professional or consultant activity,

(ii) be administrators or employees of public or private bodies, (iii) hold other public office of any kind whatsoever, including being elected or representing political parties or (iv) retain interests, either direct or indirect, in enterprises operating in ARERA’s regulated sectors.

ARERA’s 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. Moreover, they may not, either directly or indirectly, retain interests in the enterprises in the sector. Any violation of these rules may cause forfeiture of the post held and, should the deed not constitute an offence, be punished by a fine. A two-year cooling-off period is scheduled; for at least two years after holding office, ARERA’s board members and directors involved in regulatory issues may not maintain, either directly or indirectly, relationships of collaboration, consultancy or employment with firms operating in their specific sectors.

ARERA’s decisions are binding but subject to judicial review. Appeals against its decisions can be lodged with the Tribunale Amministrativo Regionale (TAR) (Regional Administrative Court) of the Lombardy Region. Appeals against the rulings of the TAR can be presented to the Consiglio di Stato (Council of State).

The recruitment process for hiring staff members is carried out with public and open applications. The final ranking and results are published on ARERA’s website.

Table 11 . ARERA’s formal obligations for approval

Obligations	Government	Parliament
Tariff methodology		
Opinions on issues of supply security	X	X
National development plans	X	X
Draft budget		
Annual work plan		
Annual activities report	X	X

b. Financial independence

ARERA is funded through its own resources, i.e. annual contributions paid by the service providers, which are established autonomously within the maximum percentage of 1/1000 of the contributors' revenues for the previous financial year, as set by Law No. 481/95. (actual levy 0.032 % of revenues from the electricity and gas sectors, 0.027% from water service, 0.030% from waste and 0.002% for energy infrastructures).

Although its budget is not approved by any other entity, like all Italian public bodies, ARERA falls under the spending review process, which limits its expenses. A board of accounts (composed of external experts or administrative judges) verifies ARERA's administrative and accounting management and controls the activities related to financial and asset management as well as the contracts at least once every three months, even on random basis. This board also checks the acts related to financial and asset management and periodically checks the cash values assigned to the cashier.

c. Functional independence

ARERA's decisions are subject to judicial review; they can be appealed in the council of State (Consiglio di Stato), and while the appeal is being processed, the contested decision is suspended.

5.11.3 Competences

a. Access to information

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

b. Security and quality of supply

ARERA is fully competent regarding the quality and level of maintenance of the networks as well as the quality of supply; it defines the indicators and standards and may impose fines and penalties. It also monitors the medium- and long-term supply/demand balance in the national market as well

as the expected future demand and envisaged additional capacity; however, the decisions regarding these rest with the competent minister. ARERA participates in the implementation of measures to cover peak demand and address any shortfalls of one or more suppliers. Moreover, it monitors new investments, providing the necessary regulatory framework for tariff setting and capacity allocations, and it is responsible for controlling the tendering procedures for new infrastructure investments.

c. Market opening and market monitoring

Based on the EU directives and their implementation in the Italian primary law, the natural gas market was completely liberalised in 2002. The electricity sector was opened in 1999 when the former monopoly was split into separate companies dealing with generation, transmission, distribution and sales activities. Since 2007, all consumers can choose their supplier, though Small and medium-sized enterprises (SMEs) and households may remain under regulated tariffs. After various postponements, the Italian government has decided to set the end of the regulated retail electricity and gas markets in January 2021 for small enterprises and in January 2022 for micro-enterprises and domestic customers.

ARERA monitors wholesale and retail markets and reports to the Autorità garante della concorrenza e del mercato (Italian Antitrust Authority) any suspected infringements of Law No. 287 of October 10, 1990 by the companies operating in the electricity and gas sectors.

d. Tariff setting

ARERA sets the tariffs and tariff methodologies for the transmission and distribution networks. It also determines access to cross-border infrastructures and sets connection fees. The general principles involve adopting cost-reflective methodologies and promoting improvement in the quality of service. ARERA has the power to require TSOs and DSOs to modify terms and conditions, tariffs, rules, mechanisms and methodologies to ensure they are cost reflective and applied in a non-discriminatory manner. On the other side, ARERA may penalise a non-performing service by reducing the rate of return over the tariffs.

ARERA applies the criteria of transparency when adopting general rules and decisions. This process involves full consultation with the operators and the associations representing the interested parties (consumers, environmental organisations, trade unions and business associations) through the circulation of documents and the collection of written observations. These are then discussed where appropriate during collective and individual hearings prior to issuing any provisions. These hearings are governed by specific regulations that allow the associations to bring specific and urgent questions to ARERA's attention and propose that these questions be discussed.

e. Licensing

ARERA may address observations and recommendations about licenses or authorisations to the government and parliament. Meanwhile, observations and recommendations about licensing, convention and authorisation schemes as well as any changes to or renewal of the existing schemes are addressed to the Ministry of Economic Development.

f. Dispute settlement

ARERA oversees dispute settlement among consumers and the regulated operators, as derived from the EU directives. The main topics addressed are grid access, TPA, cross-border disputes, unfair commercial conducts, errors in billing, undue disconnections and switching.

g. Unbundling

One of ARERA's main powers is the competence to issue guidelines for the accounting and administrative unbundling of the various activities under which the electricity and gas sectors are organised.

Unbundling is carried out to achieve the objectives of (i) transparency and standardisation in the annual accounts of the companies operating in the regulated sectors, (ii) monitoring the costs of individual services and (iii) 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

ARERA can (i) set or approve rules regarding the management and allocation of interconnection capacity (generally shared within the EU regulatory framework), (ii) issue secondary legislation, including market rules, grid codes and other such technical rules (grid codes and system operation rules are elaborated by the TSO\DSO and submitted to ARERA or approval), (iii) define metering rules and charges, (iv) approve operational and planning standards, including schemes for the calculation of total transfer capacity, (v) require that transmission and distribution operators correct any congestion difficulties, (vi) grant exemptions for TPA for new investments, (vii) set incentive regulation and (viii) support the development of RES.

ARERA establishes the 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 the response time to calls or complaints) and the technical aspects of the service (such as service continuity and safety). ARERA sets automatic refund mechanisms to compensate users and consumers when the standards are not met.

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

Regarding infrastructure development, ARERA reviews and approves national development plans and provides its opinion on these plans to the government. It sets 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, which corresponds 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 No. 481/95, ARERA has the following powers:

- It issues directives concerning the production and delivery of the services by the parties operating the said services. In particular, it establishes 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.
- It publicises the conditions under which the services are provided to ensure maximum transparency, the competitiveness of the supply and the opportunity for consumers to make better choices.
- It assesses the complaints, appeals and reports from consumers, individuals or associations to respect the standards of quality and tariffs by the service providers. It may intervene and, where necessary, persuade the service providers to change their mode of operation or revise the service regulations.
- It verifies that the measures adopted by the parties operating the service are adequate to ensure the equal treatment of all consumers.
- It guarantees an uninterrupted energy supply, periodically checking quality and efficiency of the services and even surveying the opinions of the users.
- It guarantees all information about how the services are delivered and the relative quality levels.
- It ensures a prompt response to complaints, claims and reports concerning the quality and tariff standards.

With regard to vulnerable consumers, ARERA implements government measures in the energy sectors and jointly acts with the antitrust authority. Its main activities are relevant to complaint

management (adopting alternative dispute resolution mechanisms as well). It also monitors energy prices and communication to improve consumers' awareness.

5.11.4 Internal organisation

ARERA formulates its own procedures for the adoption of provisions and enjoys organisational autonomy in laying down the rules governing its internal organisation, functioning and accounting procedures, even if the maximum number of its staff members is fixed by law. The recruitment of professional and management staff involves open competition as well as the evaluation and assessment of the candidates by an independent selection panel.

The law defines the salaries of the board members, and they are at a similar level as those of government officials but lower than those of industry officers. The terms and conditions for the employees are specific for independent regulators, and their salaries are determined according to a set pay-scale for independent regulators. The salaries of the staff members are at similar levels as those of industry personnel but higher than those of civil servants. The staff consists of 224 employees on permanent and temporary contracts, along with 16 secondments. Of these, 167 are on permanent contracts and 57 on temporary contracts. The staff distribution by department is given below:

- Regulatory Affairs Department | 108
- Consumers Affairs | 16
- Enforcement Department | 20
- IT Department | 8
- Other (Legal, Institutional Affairs, HR, etc.) staff | 88

ARERA has almost 100 databases for different aspects for its regulated sectors; their contents are provided on a periodical basis by the regulated entities. ARERA's budget is around 77 million euros per year, 57% of which is devoted to salaries and 5% to IT. Every year, it costs 1.27 euros per consumer and 740 euro/MW per installed capacity. Apart from MEDREG, ARERA is full member of

CEER (Council of European Energy Regulators) and WAREG (European Water Regulators).

5.11.5 Enforcement

In case of non-compliance with regulations, ARERA may sanction operators with fines and penalties. A name-and-shame policy allows publishing a comparative table of the operator's performances, such as the results of a survey for the call centre of market operators. According a new procedure, operators may submit commitments to future compliance to voluntarily recover their performance or behaviour.

5.11.6 Transparency and accountability

ARERA's website is key in making information on its internal organisation, objectives and processes available to every stakeholder. All of its provisions are also published on the website while preserving confidential or sensitive data. ARERA extensively uses consultation procedures, such as public hearings, written consultations and workshops. Additionally, ARERA has a new tool to promote the participation of stakeholder in the decisional process – Permanent Observatory on Energy Regulation

Adopting a wide communication plan that is particularly devoted to raising consumers' awareness and awareness about its activities, ARERA presents an annual report of its activities and the main features of the regulated sectors to the parliament. Regarding voting procedure, each board member has a single vote. As the board is comprised of five members, deadlock will not occur.

5.12 EMRC (Jordan)

5.12.1 Legal status

Energy and Minerals Regulatory Commission (EMRC) is a governmental body with a legal existence and financial and administrative independence; it is considered to be 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 organisations.

5.12.2 Independence

a. Political and legal independence

EMRC is a distinct entity that acts independently, though it is directly related to the prime minister¹⁷. In some cases, it may be addressed in its decisions.

EMRC is managed and supervised by a body called the Council of Commissioners, which is constituted by five full-time commissioners, including the chief commissioner and deputy chief commissioner. The commissioners are appointed by the Council of Ministers upon the recommendation of the prime minister, and their salaries, remuneration and all financial rights should be fixed by virtue of the appointment decision¹⁸. Their appointment depends on the fulfilment of specific requirements, such as minimum years of experience and a bachelor's degree.

The commissioners must not have any financial interest in any business connected, either directly or indirectly, to the regulated sector or engage in any related activity. They should not be the spouse or relative of the first or second degree of a person who has such an interest or is engaged in such an activity. However, if the prime minister is satisfied that these will not interfere with the person's impartial discharge of their duties, they may be appointed a commissioner. Moreover, they must not be an employee of any of the licensees and cannot have worked for any of them during the year preceding the date of their appointment.

The term of a commissioner is four years. However, among the first commissioners, the chief commissioner and the deputy chief commissioner were appointed for a term of four years, one commissioner was appointed for three years and the remaining commissioners were appointed for two years. The term of a commissioner may be renewed once. The cooling-off period for board members and staff members is one year.

Outside of the expiration of their term or resignation, a commissioner may be terminated in any of the following cases:

¹⁷ Temporary Law No. (64) for the Year 2003, General Electricity Law, Articles 5, 6.

¹⁸ Temporary Law No. (64) for the Year 2003, General Electricity Law, Article 8.

- They lose one of the membership conditions.
- They are absent from three consecutive or six non-consecutive meetings per year for reasons within their control and not acceptable to the council.
- They are inability to perform their duties for mental or physical reasons.
- They are convicted of a criminal or misdemeanour penalty breaching honour, such as bribery, embezzlement, theft, forgery, misuse of trust, false affidavit or any other crime that is contrary to public morals, or if they are otherwise declared bankrupt (unless their standing is restored).
- They are dismissed pursuant to the illegal diffusion of confidential information.

Staff members are recruited via open call.

b. Financial independence

EMRC is financially independent by the government budget, being funded by license fees and fines that are set autonomously to match its financial needs. The license fees constitute approximately 95% of the total budget. The same independence is found in managing the financial resources, even though the government must approve the annual budget, which must be compliant with rules and/or guidelines arising from the state budget. EMRC's accounts as well as its budget are audited in accordance with the international accounting

standards by a certified legal auditor appointed and paid by the council.

c. Functional independence

EMRC's regulatory decisions are binding but may be appealed to in the supreme court. In such cases, the decision is suspended until the final decision.

5.12.3 Competences

a. Access to information

EMRC has access to all the information specified in the terms and conditions of the licenses.

b. Security and quality of supply

EMRC monitors the development of the energy sectors, both for generation and for network development and maintenance. It actively provides measures to cover peak demand. EMRC aims at regulating the sector by balancing the interests of the consumers, licensees, investors and any other relevant parties. EMRC also works on ensuring the provision of safe, stable, ongoing, high-quality and adequate services while ensuring the compliance of the enterprises working in the sector with the standards of environmental protection as well as the laws and general safety conditions applicable in Jordan.

c. Market opening and market monitoring

EMRC monitors the sector regarding the progression from a single-buyer model to a

Table 12 . EMRC's formal obligations for approval

Obligations	Government	Parliament
Tariff methodology	X	X
Opinions on issues of supply security	X	X
National development plans	X	X
Draft budget	X	
Annual work plan	X	
Annual activities report	X	X

competitive electricity market and annually reports on the potential for competition to the minister. To this extent, the council consults the licensees, consumers, potential investors and other interested parties to obtain their views on the subject. These reports present the council's analyses 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, supply licensee or principal consumers on the other hand as well as amongst distribution and supply licensees – ought to be established. They also consider.

- the extent of the 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 the necessary metering and IT infrastructures required for the operation of a competitive electricity market;
- the financial viability of the sector; and
- the impact of competition on the prices the consumers must pay.

The competent minister presents to the Council of Ministers the report submitted by EMRC's council. When the Council of Ministers is satisfied that the sector has developed to the point where a competitive electricity market may be established, it may issue a declaration that a competitive electricity market is to be initiated and authorise the competent minister to take the necessary steps for establishing the arrangements to facilitate a competitive electricity market.

d. Tariff setting

The council determines the tariffs or prices for the licensed services, according to the methodologies adopted for regulating electricity prices. Such tariff methodologies are specified in the license of the licensee. Generation's tariffs are determined in accordance with the arrangements entered by the bulk supply licensee with the generation licensee. When determining the tariff methodologies,

- allow a licensee that operates efficiently to recover the full costs of its business activities and 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 the quality of services;
- give 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 considers any subsidy other than cross-subsidy, whether direct, by way of favourable financing terms or in any other manner, when establishing its tariff methodologies.

The council should establish tariff methodologies that reflect the terms and conditions of the initial privatisation contracts, initial IPP (independent power producers) contracts and any contract that the concession company may enter into with the bulk supply licensee. When 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 should grant an opportunity to the licensee to make representations in accordance with the procedures established by the council pursuant to a directive.

e. Licensing

EMRC grants permits and licenses to persons to construct, own or operate an undertaking or in any way engage in the business of generation, transmission, system operation, supply or distribution. A license includes the tariff methodology applicable to the licensee and approved by the commission. A generation licensee

should construct, own, operate and maintain a power station for purposes of generating electric power and selling electric power and ancillary services.

A transmission licensee should carry out the construction, operation and maintenance of a transmission system. It should also provide non-discriminatory access to the users of the transmission system.

A system operation licensee should carry out generation scheduling, commitment and dispatch, transmission scheduling, generation outage co-ordination and transmission congestion management. It should also schedule the procurement of ancillary services, carry out the necessary studies for the operation of the transmission system and ensure the system's continuity and reliability.

A bulk supply licensee should 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 the expected demand. A retail supply licensee should exclusively purchase electric power from a bulk supply licensee or an embedded generation station and resell it to the consumers in a specified area. A bulk supply licensee and a retail supply licensee should procure electric power from power stations with installed capacity of 5 MW or more in aggregate at a site through a competitive tender as specified in the license (unless the commission allows or requires an alternative method), provided that the contracts for the procurement of electric power under the initial privatisation contracts entered into by a generation licensee or its legal successor or under the initial IPP contracts are deemed to have been done in a competitive manner for the purpose of this article.

A transmission licensee should be the sole bulk supply licensee pursuant to a bulk supply license until the Council of Ministers decides on the introduction of a competitive electricity market. A distribution licensee for a specified area should be the sole retail supply licensee for that area pursuant to the retail supply license granted to it. EMRC verifies the compliance of the permittees and licensees with the application of the provisions

of the laws, regulations and related instructions. Moreover, it monitors the permittees and licensees to ensure their compliance with the provisions of the laws and the permits and licenses granted to them. For this purpose, EMRC may conduct inspections on any entity. It may modify licenses, impose a fine on the licensees for infractions and report and announce violations of the 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. It may also settle disputes that arise between licensees and consumers involving the supply and connection of electric power, quality of service and electric tariffs. The council's decision on such disputes are subject to appeal in 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. The final decisions of the council regarding this may be challenged before the High Court of Justice.

g. Unbundling

EMRC is currently taking the necessary actions to grant the National Electric Power Company a license to practice the activities of electricity 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 in order to cover the activities to be practiced by the National Electric Power Company under the licenses to be granted thereto. In any case, a license holder for generation or distribution may not hold a license for transmission.

h. Technical competences

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

EMRC 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 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 exemptions for TPA for new investments;
- set, approve or provide an opinion on the standards of service quality and congestion management rules/standards;
- approve development plans;
- set incentive regulation;
- support the development of RES; and
- promote energy efficiency measures.

With respect to investment planning and cost recovery, EMRC reviews and approves national development plans and provides an opinion on them to the government.

i. Consumer protection

EMRC aims at protecting the interests of consumers, provided they comply with the terms set by the licensees with the consent of the commission for providing electricity services, 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) in cooperation with the competent ministry and consumer protection agency.

Moreover, several tools are used to inform consumers about their rights, manage their complaints and ensure they can check and monitor energy prices. The quality of the services provided to consumers is monitored and eventually enforced to network licensees.

5.12.4 Internal organisation

According to the funding law, EMRC is autonomous in defining its organisation, determining the number of staff members and managing its HR policy. EMRC's work in terms of planning, development and HR management has expanded to include all of its employees.

A new organisational chart has been approved, consisting of 16 directorates and operating units. Meanwhile, three directorates for oil, gas, petroleum and shale oil were created and will be activated upon mandating EMRC with the task of regulating these sectors. In 2014, the strategic plan of EMRC for 2015–17 was endorsed along with endorsing its vision, mission and core values and adopting a logo reflecting the current and future duties of EMRC.

Due to the expansion of EMRC's duties, it worked on appointing qualified HR personnel, and 11 employees in various specialisations were appointed; furthermore, it coordinated with the Civil Service Bureau for completing the procedures of appointment of another 10 employees and filling 30 vacancies. Presently, EMRC has 370 employees, with 160 engineers and technicians and 210 administration, financial and other employees.

EMRC's staff members are selected with examinations, and the final appointment is overseen by the council, which may remove or apply penalties and incentives. The terms and conditions for the employees are the same those in all public sectors. Their salaries are lower than those of similar positions in energy sectors and scaled according to professional experience and background. A code of ethics that binds all staff members has been adopted.

EMRC's last approved budget is 6,000,420 euros in 2020.

In 2014, the capacity of the internal communication network was increased for 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 EMRC.

5.12.5 Enforcement

The council may verify if the licensee is carrying out

its obligations under any legislation¹⁹, in addition to its compliance with the codes of conduct or the terms and conditions of the license. If the council determines that the license should be cancelled, it should notify the licensee of this decision and the reasons behind it. It should also allow the licensee an opportunity to demonstrate that it has taken the measures to remedy the issues pointed out by the commission.

If the licensee has not remedied the issues, the council can cancel the license. It can also order the sale or transfer of the licensee's undertaking and take interim arrangements pending the sale. The council may allow the license to remain in force, provided it is amended with further terms and conditions deemed necessary; such amendments will become 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. Prior to this, the council should inform the concerned licensee the grounds upon which an order is proposed to be issued and allow it to make a representation against the same. An order may specify a penalty for each day of non-compliance; such a penalty may not exceed one thousand Jordanian dinars per day for the first contravention and three thousand Jordanian dinars per day for subsequent such contraventions.

5.12.6 Transparency and accountability

In EMRC's annual report (published on its website), detailed information is provided on its mission, vision and core values:

- 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 ionised radiation in peaceful areas to ensure the

¹⁹ Temporary Law No. (64) for the Year 2003, General Electricity Law, Articles 39 and 40.

interests of consumers and investors".

- Core values: transparency, integrity and justice, maintaining competitiveness, team spirit, performance, motivation, quality control and assurance, community responsibility.

EMRC recently modified the website²⁰ of the former Electricity Regulatory Commission to include information on the Energy and Minerals Regulatory Commission in Arabic and English. The website contains a wealth of information on the main statistics of the energy sector, tariffs, main regulatory decisions and documents such as performance codes, standard licenses, procedures for applying licenses and laws. To engage stakeholders in the regulatory process, public hearings, written consultations, workshops and focus groups are used.

EMRC, through the competent minister, provides the Council of Ministers with the annual report of the regulated sector and publishes the non-confidential decisions and the resolutions issued by it. The report also contains the reasons for those decisions and resolutions. The annual reports (also in English) are published and available on internet with a detailed description of EMRC's activities, such as its organisational chart, the composition of the council and financial statements. The council issues directives determining the procedures for and the conditions of allowing the public to examine non-confidential documents available at EMRC²¹.

Regarding the voting procedure²², the Council adopts its resolutions by a majority vote of the attending commissioners, 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 their dissent in the minutes of the meeting.

5.13 REWS (Malta)

5.13.1 Legal status

The Regulator for Energy and Water Services (REWS)

²⁰ <http://www.emrc.gov.jo>

²¹ Temporary Law No. (64) for the Year 2003, General Electricity Law, Article 27.

²² Temporary Law No. (64) for the Year 2003, General Electricity Law, Article 10.

was established by the House of Representatives on July 31, 2015 through the Regulator for Energy and Water Services Act (Act XXV) of 2015. The functions of REWS are established by law; it is responsible for the regulation of energy and water services in Malta. REWS took over matters relating to energy, including electricity and fuel, and water services from the Malta Resources Authority, which had been established in 2001.

5.13.2 Independence

a. Political and legal independence

REWS is an independent entity separated from other public bodies and is not directly influenced by other entities; there is clear clarity in its roles and functions. Its board²³ consists of a chairman and not less than four and not more than six other members. There is a public call for candidates, which includes predefined criteria and a selection committee. The members of the board are appointed by the minister responsible for energy and water services for a term of five years or for a longer period that may be specified in the instrument of appointment, subject to a maximum term of seven years. The members so appointed may be re-appointed, only once, on the expiration of their term of office.

An appropriate rotation scheme for the appointment of the board members should be instituted such that the end date of the term of office of the commissioners is not the same for all members. In order to enhance the independence

²³ "Regulator for Energy and Water Services", Cap. 545 Article 3.

of the board, the commissioners may be removed from office if (i) a member is found to be unable to act independently from any market interests; (ii) a member is found to be taking instructions or directions from any other public or private entity in the exercise of the regulatory functions assigned to REWS; or (iii) a member has been found guilty of misconduct under any law.

Moreover, REWS' staff and commissioners are not allowed to be employed or have any form of collaboration with the regulated entities. However, they can have interests in them or be involved in political activities. REWS' staff members are selected with an open call and hired if they are compliant with certain defined criteria. General rules of civil service apply to both board and staff members when finishing their service with REWS.

The minister may, in relation to matters deemed to affect the public interest, communicate to REWS written directions of a general character that are not related to REWS' regulatory powers; REWS may consider and implement these directions in a manner that ensures that the provisions regarding its independent regulatory powers are in no way compromised.

The table below summarises the formal obligations of REWS vis-à-vis the government and the parliament.

b. Financial independence

REWS' funding is derived from license and market participation fees set by law. Moreover, to ensure

Table 13. REWS' formal obligations for approval

Obligations	Government	Parliament
Tariff methodology		
Opinions on issues of supply security		
National development plans	X	
Draft budget		
Annual activities report	X	X

financial independence, REWS is autonomous in managing its own resources; the budget must be approved by REWS' board and annually reviewed by external auditors. So far, REWS' budget has always been approved in accordance with its needs.

c. Functional independence

REWS' decisions are legally binding for the operators of the regulated sectors, but they may appeal a decision in the Administrative Review Tribunal and Court of Appeal. In general, the effect of a decision to which an appeal relates is not suspended while the appeal is processed, unless the Administrative Review Tribunal or the Court of Appeal orders thus.

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

5.13.3 Competences

a. Access to information

REWS has full access to the financial information of the sector participants (such as accounts, operational details, agreements and personnel information) and the technical information of the utilities.

b. Security and quality of supply

REWS monitors the (i) medium- and long-term supply/demand balance in the national market, (ii) expected future demand and envisaged additional capacity, (iii) quality and level of maintenance of the networks and (iv) quality of supply. This activity is carried out without taking any operational actions, nor does REWS participate in any activities related to the tender processes for new infrastructures.

c. Market opening and market monitoring

Concerning the opening of the electricity and gas markets, Malta has a derogation – under both Directive 2009/72/EC and the Clean Energy Package – 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, collecting information on market abuse and anticompetitive behaviour is within REWS' competences; this is done in close coordination with the national antitrust authority. REWS' competences include prohibiting abusive practices that affect wholesale energy markets and detecting and investigating market manipulation practices.

d. Tariff setting

REWS has the power to fix and approve the methodologies used to calculate or establish the terms and conditions for the supply of electricity to customers and the purchase of electricity by a DSO where appropriate.

Concerning this crucial task, REWS has the power to approve

- the methodologies used to establish transmission and distribution network tariffs;
- transmission and distribution network tariffs;
- the methodologies for the provision of balancing and ancillary services (which are fixed in case of gas); and
- access to cross-border infrastructures.

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

e. Licensing

REWS issues licenses, determines their terms and conditions and reviews and monitors the licensees' compliance with the terms and conditions. REWS may also impose a fine on licensees for violations of the terms and conditions.

f. Dispute settlement

REWS is responsible for dispute settlement between the industry and customers as well as between industry operators. It may also receive complaints against distributors with regard to grid access, TPA and cross-border disputes.

g. Unbundling

Unbundling is required at the management accounts level, and REWS should take the necessary steps to ensure that the accounts of electricity undertakings are kept in accordance with the requirements of the regulations. There is no national or EU obligation in Malta to unbundle DSO and TSO infrastructures. Moreover, REWS sets the guidelines for compliance review and reporting obligations; it also intervenes to modify the accounting practices wherever there is insufficient unbundling.

h. Technical competences

- REWS has a wide range of competences related to network regulation. It has the power to
- manage and allocate interconnection capacity;
- set operational and planning standards, including schemes for the calculation of total transfer capacity;
- require that transmission and distribution operators correct any congestion difficulties;
- set guidelines for congestion management;
- grant exemptions for TPA for new investments;
- set incentive regulation;
- support the development of RES; and
- promote energy efficiency measures.

REWS also defines the standard of service quality and may sanction or intervene in case of non-compliance. Regarding investment planning and cost recovery, REWS monitors the investment plans of DSOs.

i. Consumer protection

One of REWS' main objectives, set by means of its act of establishment, is the responsibility to ensure 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. This must be done in respect of the prices, quality and variety of the services and/or products regulated by or under the act. Vulnerability issues are addressed via social policy, but REWS still has tariff setting powers.

5.13.4 Internal organisation

REWS is completely independent in deciding its organisation. Its affairs and business are its own responsibility, and the executive conduct of the administrative control of its officers and employees is the responsibility of its CEO.

REWS may establish directorates, units, divisions and sections, as appropriate; these are vested with the responsibilities REWS deems appropriate. Regarding its HR policy, the board is the final decision maker in selecting, appointing, removing or penalising the staff members. Their terms, conditions and salaries are in line with those of national civil servants.

REWS' staff distribution, excluding the board, as of May 2020 are given below:

- Corporate (CEO office, Finance and IT) | 15
- Regulation | 9
- Competence, Licensing and Enforcement | 16
- Schemes and Customer Care | 5

REWS does not have a specific IT system to collect data from the regulated entities, but it may require any person or authorised provider to provide data, including financial information, that REWS

considers necessary. Those who fail or refuse to provide such information will be liable to the imposition of an administrative penalty prescribed by REWS.

Regarding REWS' budget, for 2020, it is estimated to be around three million euros; 60% of this is devoted to salaries and 10% to IT.

For the time being, there is no specific code of conduct for the board and staff members. However, the Public Service Management Code, which is applicable to the civil service as well as wider public service, is also applicable to REWS' public officials. Its members, officers and employees are deemed to be public officers within the meaning and for the purposes of the Criminal Code.

Apart from MEDREG, REWS is involved in the following international or regional associations or organisations: ACER, WAREG, REFUREC, CEER.

5.13.5 Enforcement

According to the Electricity Market Law 25(1) and the REWS Act, REWS has the power to impose fines and sanctions on the regulated entities. It may impose an administrative penalty upon those who infringe on or fail to comply to any provision, directive or decision of REWS or any other law that REWS is entitled to enforce. Similarly, it penalises those who fail to comply with a legally binding decision of the Agency for the Cooperation of Energy Regulators or with any condition of any authorisation granted under the REWS Act. Other enforcement mechanisms may include the temporary prohibition of professional activities, attachment orders, freezing of funds, demanding information, summoning persons for hearing, appointing inspectors and conducting inspections.

REWS may revoke or modify an authorisation when the conditions for authorisation are no longer met by the service provider. Such decisions should be adopted by a simple majority vote of the members present. The chairman – or, in the chairman's absence, the deputy chairman or another person appointed to act as the chairman – should have the initial vote and, in the event of an equality of votes, a casting vote. No decision will be valid unless supported by at least two REWS members.

5.13.6 Transparency and accountability

The institutional website²⁴ contains all relevant information on REWS such as its mission statement, vision and values:

- 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".
- Values: honesty, transparency, integrity, non-discrimination, professionalism.

The website acts as the main communication platform to all stakeholders: consumers, regulated operators, service providers and the public. It 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 for authorisations and the guidelines for their submission, licenses and permits issued by REWS as well as information related to the 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. These consultations offer the possibility to submit written opinions and contributions. After the end of each financial year, to the Minister of Energy and the minister responsible for finance, REWS submits a report of its activities during that financial year. This report contains information relating to REWS' proceedings and policies. The competent minister presents this report to the House of Representatives.

5.14 REGAGEN (Montenegro)

5.14.1 Legal status

The Montenegro Energy Regulatory Agency (REGAGEN) was established on January 22, 2004

²⁴ <https://www.rews.org.mt/#/en/home>

according to the Energy Law as an autonomous, non-profit organisation that is functionally independent from the state authorities and energy undertakings. REGAGEN carries out its public authorisations in the energy sector. The establishment of REGAGEN is solely based on legislation, which means that the regulatory authority cannot be liquidated by the 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), the regulated utility services under the competence of the Energy Regulatory Agency (REGAGEN) are public water supply and wastewater management.

5.14.2 Independence

a. Political and legal independence

REGAGEN is the sole authority responsible for regulating the energy sector in Montenegro. It 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.

The term of office for the chairman and commissioners is fixed at two mandates maximum. The chairman and commissioners cannot be dismissed before their term expires unless they have a criminal record or a severe health problem. According to the law, the board members, director

and deputy director of REGAGEN as well as their immediate family members should not be managers of or have material, financial or other interest in an undertaking in the energy sector. REGAGEN employees cannot be employed by or receive compensation from undertakings in the energy sector during their employment in REGAGEN. In case these rules are violated, they will be removed from the position.

The table below summarises the formal obligations of REGAGEN vis-à-vis the government.

b. Financial independence

REGAGEN is funded with license fees, annual charges for use of licenses for conducting energy activities, charges for the dispute resolution carried out by REGAGEN pursuant to the Energy Law and fees for determining the status of a closed electricity distribution system. The licenses fee amounts are set by REGAGEN's decision, based on its adopted financial plan. This decision is made annually and relates to two energy sectors: (i) electricity and (ii) oil and gas.

The funds necessary for the financing of REGAGEN 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 the State Auditor Institution.

c. Functional independence

The decisions of REGAGEN can be appealed in

Table 14. REGAGEN's formal obligations for approval

Obligations	Government	Parliament
Statute	X	
Draft budget		X
Annual work plan		X
Annual activities report		X
Report on energy sector		X

the administrative courts, and while appealing, the contested decision remains in effect pending appeal.

5.14.3 Competences

a. Access to information

REGAGEN's mission is to regulate the electricity and natural gas markets and to ensure the efficient and sustainable operation of these markets by guaranteeing consumer rights and respecting the environment. In this regard, it is prescribed by the Energy Law that upon a request made by an authorised person from REGAGEN, a gas or energy undertaking carrying out activities in the electricity, heat energy or gas sector must provide data, information and documents within the deadline set by the agency, i.e. they must provide access to its business books necessary for controlling their work and business activities.

b. Security and quality of supply

REGAGEN sets the minimum quality of supply, including

- quality of service, specifically regarding the time taken by TSOs and DSOs for electricity and gas to make connections and repairs;
- continuity of supply; and
- voltage quality for electricity and quality of gas.

REGAGEN does not implement measures to cover peak demand or address any shortfalls of one or more suppliers since the TSO and the Market operator are obliged to do it. REGAGEN plays a role in prohibiting the abusive practices that affect wholesale energy markets and in detecting and investigating market manipulation practices.

c. Market opening and market monitoring

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

Regarding matters related to competition, Montenegro adopted a Competition Law in 2012. Its provisions are largely in line with the EU acquis on competition. The authority in charge of enforcing this law is the Agency for Competition Protection (ACP). Article 48, paragraph 7 of this law prescribes that if the control identifies irregularities in the operation or acting of the undertaking that are contrary to the rules of competition, supply safety, customer protection and safety, REGAGEN should inform the authority competent for competition or customers' protection. Moreover, according to Article 49 of the Energy Law, REGAGEN should perform direct monitoring over the functioning of the electricity and gas markets and impose measures for eliminating the identified deficiencies in market functioning. REGAGEN should also cooperate with the body competent for competition, financial market regulators and the competent community body during research related to competition issues.

With regard to prohibiting abusive practices, REGAGEN has a role in market monitoring to a certain degree. Namely, Article 48 of the Energy Law prescribes that REGAGEN will supervise and analyse the operation and business activities of energy undertakings with respect to the application of market rules and an undertaking's market actions; it will monitor the degree and effectiveness of opening the market as well as competition on the retail and wholesale levels, including electricity markets. This includes the prices for households (subscription, rate of change of supplier, rate of disconnection, provision of ancillary maintenance services per approved prices and complaints of household customers) as well as other violations or limitations of competition (the provision of respective information and referring of specific cases to the authorities competent for competition). However, REMIT regulation has not yet been transposed into the national legislation, and REGAGEN does not have the powers necessary to investigate and enforce market abuse prohibitions or impose sanctions for market manipulation practices.

d. Tariff setting

REGAGEN's significant role in the regulation of electricity prices is reflected in the establishment of the acts governing this segment of the regulation as well as the following aspects:

- methodologies for setting of prices, terms and conditions for
 - » the use of electricity transmission and distribution systems,
 - » use of gas storage systems, LNG and LPG (liquefied petroleum gas) facilities,
 - » provision of ancillary and system services and balancing services for electricity and gas transmission systems;
- methodologies for setting prices for the use of transmission or distribution systems paid by the users of direct lines connected to these systems;
- methodologies for setting regulated tariffs for tariff customers and other customers by regulated tariffs for the electricity or gas supplied by the public supplier;
- rules to modify tariffs at the request of entity or by REGAGEN; and
- rules for settlement of difference between justified and realised revenues and approved costs between individual DSOs;

The Energy Law authorises REGAGEN 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, which may be also offered by other suppliers to eligible customers;
- tariffs applied by a SoLR;
- tariffs for the use of LNG and LPG facilities;
- charges for the removal of congestions on identified entry or exit points in the gas transmission system, which are a part of the price (tariff) for the transmission and transit of gas;
- charges for the operation of the market operator;
- rules for access to cross-border capacities; and
- methodology for compensating the connection of the network.

A hybrid regulatory method is implemented as a type of economic regulation that aims to limit the allowed revenue, provide efficiency improvement incentives and allow risk-sharing between the operators and users of the system (risk related to changes in deployed capacity).

e. Licensing

According to the Energy Law, REGAGEN should set the rules on licenses for the performance of energy activities. Regarding this competence, REGAGEN

- issues rules on the manner and conditions for issuing, modifying and revoking licenses;
- Issues, modifies and revokes licenses;
- monitors the activities of the energy undertakings regarding compliance with the terms and conditions set by the license;
- makes annual decisions on setting fees for licenses; and
- maintains a register of issued and revoked licenses.

Regarding the time to deliver a license, if the request is completed, the usual time for issuing the license is 15–20 days. If the request is not completed, then the maximum time for issuing the license is two months.

f. Dispute settlement

REGAGEN decides on complaints relating to

- an act of the TSO or DSO regarding denial of access, i.e. connection to the transmission or distribution system;
- terms and conditions from a connection consent;
- calculation of electricity volumes in the event of unauthorised consumption; and
- final customers in case of the suspension of delivery of electricity or gas.

In addition to deciding on complaints as an appellate body, REGAGEN is authorised to resolve disputes between energy undertakings or between energy

undertakings and the users of their services; these disputes may arise from their contractual relations set in accordance with the law. The contractual parties must entrust the settlement of disputes to REGAGEN to enable its intervention.

g. Unbundling

REGAGEN plays a role with respect to utility unbundling; however, it does not have the duty of establishing guidelines on how separate accounts should be drawn up for the unbundled entities and of drawing up guidelines for compliance review and reporting obligations regarding the unbundling process.

h. Technical competences

REGAGEN has the power to approve rules regarding the management and allocation of interconnection capacity. It can approve operational and planning standards, including schemes for the calculation of total transfer capacity. It can also grant exemptions for TPA for new investments.

REGAGEN can only issue secondary legislation, including market rules, grid codes and other technical rules, and define metering rules and charges; it does not require transmission and distribution operators to correct any congestion difficulties. REGAGEN can set and approve both the standards of service quality and congestion management rules. However, REGAGEN does not have the power to enforce sanctions these standards are violated. Instead, it submits these violations to the relevant body. Currently, there are rules on minimum quality standards for electricity delivery and supply, where thresholds for standard services are set, and an energy utility is obliged to pay financial compensation for breaching these target values. REGAGEN's responsibilities are based on resolving complaints regarding quality issues, where if a breach of the standards is confirmed, the agency imposes fines on the energy utility in the form of an act.

i. Consumer protection

According to Article 41, REGAGEN's objectives include providing benefits for final customers through efficient functioning of market, promote competition and protection of the final customers. Article 48 prescribes that REGAGEN supervises and analyses

the operation and business activities of all energy undertakings; in case irregularities contrary to the customers' protection and safety are identified in the operations of the undertaking, REGAGEN should inform the authority competent for competition or customer protection.

REGAGEN does not have the power to address the needs of vulnerable consumers since vulnerability issues are addressed by the competent ministry and the Consumer Protection Agency. REGAGEN has the power to monitor the time given to the sector participants to make connections and repairs; however, it cannot intervene if this time is exceeded, nor can it sanction the sector participants.

5.14.4 Internal organisation

According to its statutes, REGAGEN can decide on its own internal organisation as well as its HR policy. Unlike other MEDREG members, the director – as opposed to the regulatory board – is the final decision-making authority for the selection and appointment of staff members as well as for setting and removing penalties and incentives for them. All staff members are bound by a code of ethics.

The salaries for the board and staff members are established according to criteria similar to that of public officials set by law. The terms and conditions of employees are the same as those of national civil servants. Currently, REGAGEN has 37 employees (of which four are from the water regulation sector); they are mainly graduates of engineering, economics and law. REGAGEN's budget is 1,492,841,95 euros, and around 64% of this is dedicated to salaries in gross amount (net amount 36%) and 1% is devoted to IT. The rate of budget per consumer is 3.77 euros, and the rate of budget per MW installed capacity is 1462.41 euros.

Apart from MEDREG, REGAGEN is involved in following international and regional associations or organisations: Energy Community, WAREG, CEER, AIB, NARUC.

5.14.5 Enforcement

REGAGEN does not have the power to sanction the sector participants. It also cannot publish comparative reports demonstrating the insufficient performance of the network operators, nor can it revise tariffs or reduce rates of return in response to

violations. Its board is composed of three members, which always ensures a clear majority.

5.14.6 Transparency and accountability

All of the information on REGAGEN, such as its missions, duties and reports, are made available to the sector participants. Moreover, all its decisions are clarified to the stakeholders while taking into consideration the protection of sensitive commercial information. REGAGEN consults on draft decisions with tools such as public hearings and written consultations before making the final decisions.

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

5.15 ANRE (Morocco)

5.15.1 Legal status

Law No. 48-15 (henceforth “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

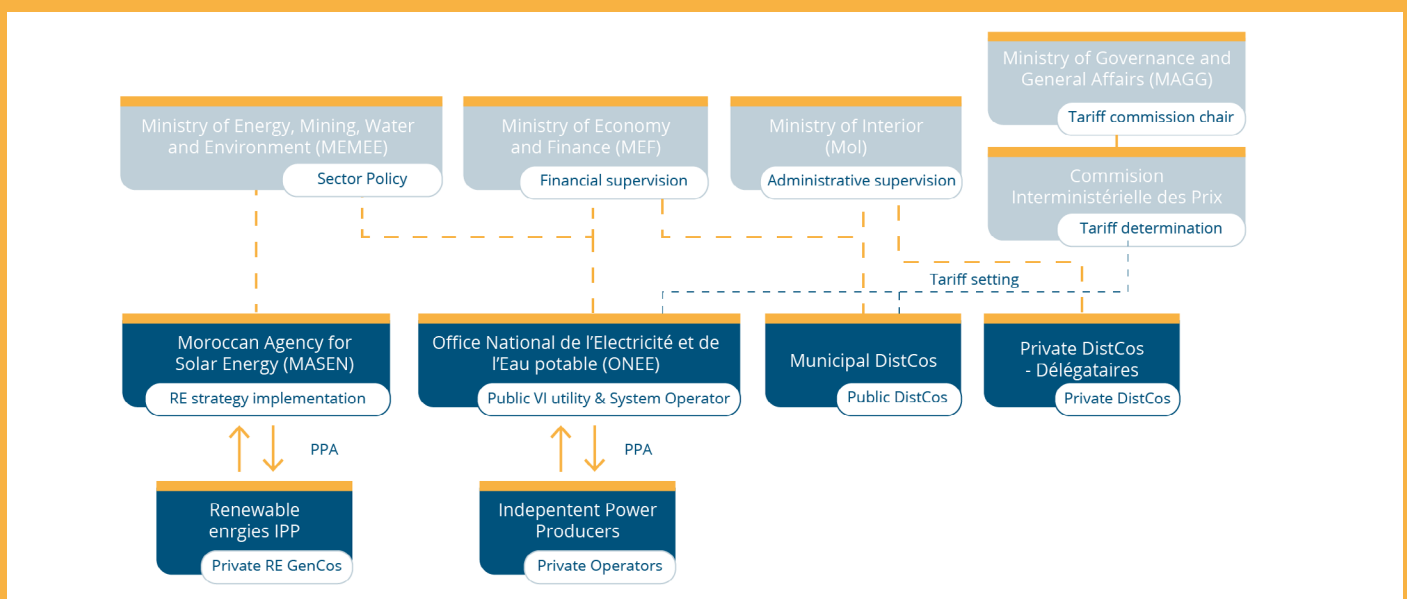
law was enacted by the Dahir No.1.60.60, dated May 24, 2016, and was published in the Official Gazette in June 2016. In 2018, the director of ANRE was appointed, and in October 2020, the first board was formed.

Until ANRE becomes functional, the responsibility for the electricity sector is divided 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 (Mol), which supervises the overall performance of the public enterprises responsible for the distribution of water and electricity in large urban areas.

MEMEE’s Electricity Directorate is primarily responsible for developing policies 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 Développement 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 the law.

Figure 29 . Public and private entities in the energy sector ¹



¹ Lessons from Power Sector Reforms: The Case of Morocco, Zainab Usman, Taye

5.15.2 Independence

a. Political and legal independence

The law provides for ANRE to have the status of an independent administrative 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 legislation that is currently applicable.

The council comprises nine members and the president. Three members are appointed by a decree: the first due to their competence in judicial or legal matters, the second due to their financial expertise and the third due to their competence in technical issues related to electricity. Three more members are appointed by the president of the House of Representatives based on their competence in legal and economic matters or 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 term of office for all members is six years, and it can be renewed once.

The council adopts the general policy of ANRE; it approves its rules of procedure and organisational 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 and annual budget of ANRE and adopts ANRE's annual reports. The law states that the council members may be removed only if they commit serious misconduct in the performance of their duties, obtain a position in the government 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 should 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 this is fixed by ANRE's council;
- other sources of income, such as grants paid by the state, the proceeds of monetary penalties, gifts and bequests, other income and miscellaneous income, collected in accordance with the legislation and current regulations; and
- contributions paid by disputing parties to the Dispute Resolution Committee; the amount of such contributions 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 the approval of its council. An external auditor, appointed by the council, is responsible for the annual audit of ANRE's accounts.

c. Functional independence

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

5.15.3 Competences

a. Access to information

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 the transmission and distribution tariffs. Thus, in principle, ANRE should be able to obtain access to financial and technical information at a significant level of detail. The ministry's current level of access to ONEE's financial and technical information is also unclear.

b. Security and quality of supply

Article 18 of the law assigns to ANRE the following responsibilities related to the security and quality of supply:

- approval of the five-year network development plan for the transmission system;
- monitoring of its implementation; and
- 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 Article 18 of the law, ANRE should ensure the smooth functioning of the free electricity market and regulate the access of self-producers to the national electricity grid.

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

- It has to approve the code for the national electricity grid (including rules for access).

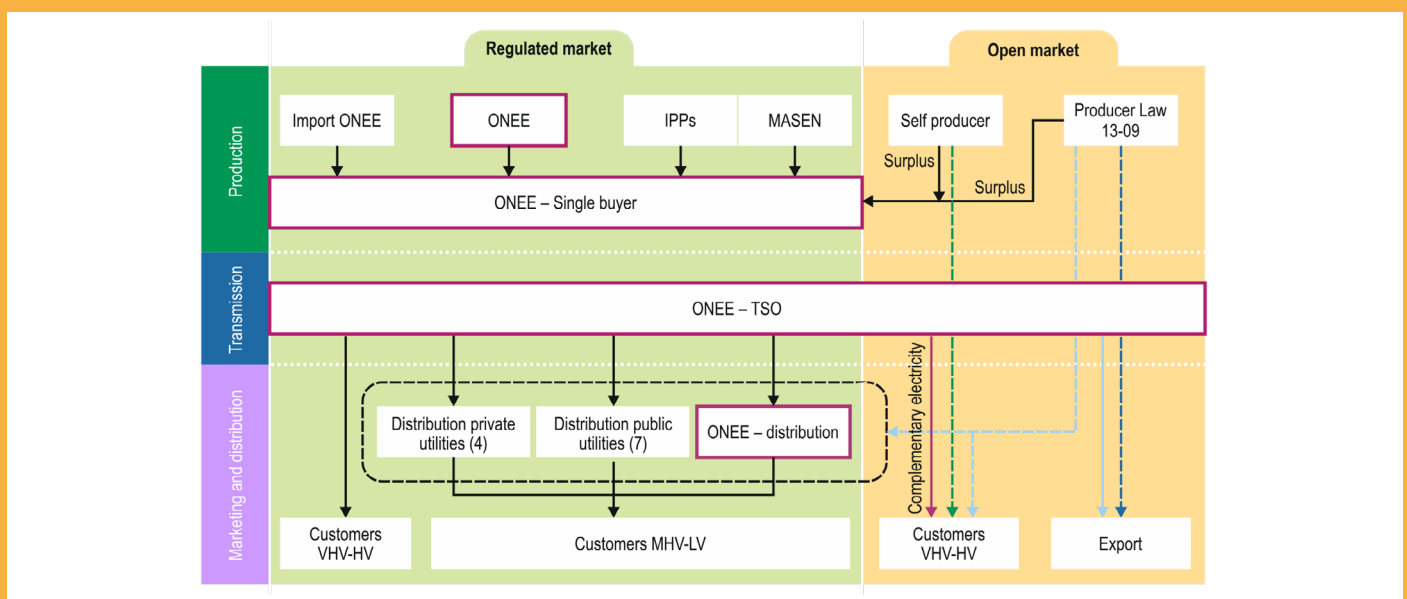
- It has to approve and enforce the codes of good conduct.

Electricity generation was partially liberalised in 1994, when Decree-Law No. 2-94-503 allowed the national power monopoly ONEE to enter into power purchase agreements with IPPs. From 2008, steps towards further market liberalisation have been taken. A liberalised self-production regime was created under Law 16-08, allowing the private generation of electricity for the purpose of self-consumption and the sale of a limited surplus electricity to ONEE. Since 2010, under Law 13-09, private power producers can use the transmission grid and enter into direct purchase agreements with end users to sell the electricity produced from renewable resources. It also opened a new market segment in which certain industrial customers could choose their electricity suppliers.

Morocco's electricity market has a hybrid structure with two main markets; on the one side, there is the regulated power market with IPPs and the public-private partnerships of MASEN along with ONEE's own generation, and on the other side, there is the open market for renewable generators and self-generators that are being set up.

The state-owned, vertically integrated incumbent ONEE owns and operates the complete transmission network, performs the tasks of the

Figure 30. Organisation of Morocco's electricity sector ¹



¹ Energy Policies beyond IEA Countries: Morocco 2019, International Energy Agency.oud, 2019.

system operator and power dispatcher and is the largest distributor and supplier of electricity. ONEE is also the sole importer of electricity from Spain and Algeria. ONEE can give concessions to private operators with purchase guarantees. It has signed 10 long-term power purchase agreements (PPAs) with independent power producers, of which six are under operation and four are under construction. These include coal, gas, wind and solar facilities.

While generation and distribution are opened to private investors, Morocco does not have an organised wholesale electricity market, and no financial exchange of electricity trades is done outside of ONEE's de facto function as the sole buyer and seller. Rules for the trading of surplus electricity, as foreseen under the legislation for self-consumption and Law 13-09, remain unclear and will be an essential requirement for market reform²⁵.

d. Tariff setting

As ANRE's mandate covers the open segment of the electricity sector, the Ministry of General Affairs remains responsible for tariff setting in the regulated segment of the electricity market.

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; and
- approves the tariffs for the use of medium-voltage.

The law also provides some basic guidelines regarding 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 the capital costs plus a fair return on investments.

e. Licensing

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

²⁵ See footnote 24

f. Dispute settlement

The law provides for a Dispute Settlement Committee to operate as a separate body within ANRE. Three members appointed for a mandate of three years, which is renewable only once:

- A magistrate, appointed by the Supreme Council of Judicial Power, acts 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 ANRE the full capacity to approve rules regarding access to and tariffs for the electricity transmission system, including interconnections, to approve the indicators quantifying the quality of electricity supply as well as the multiannual investment plans related to infrastructure. ANRE also provides an opinion for the authorisation of new power plants.

Further, ANRE may, on its 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 the energy sector stakeholders (including customers). ANRE may also issue an opinion regarding the price of the energy to be sold to consumers.

i. Consumer protection

Over the past five to seven years, Morocco has proceeded with significant reforms towards the removal of energy subsidies for most fuel

products (diesel, gasoline and kerosene) and electricity²⁶. Social programmes targeting the most vulnerable population groups were expanded. These programmes, however, are of a more general nature (i.e. support for school-aged children, subsidised 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.

5.14.4 Internal organisation

The ANRE is staffed by officials seconded from other administrative authorities and staff recruited 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.

5.14.5 Enforcement

The law foresees that ANRE is authorised to carry out on-the-spot checks to ensure the compliance of the supervised entities with the laws and regulations applicable to their activities. However, its enforcing powers are unclear.

5.14.6 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 medium-voltage power grids;
- the opinions on dispute settlement issues; and
- the annual activity report of the ANRE.

²⁶ Programme Note on Morocco, International Monetary Fund, 2016.

5.16 PERC (Palestine)

5.16.1 Legal status

In line with Law No. 13 (issued in 2009) of the General Electricity Law and upon the recommendation of the Council of Ministers, the Palestinian president issued a decree (issued in February 2010) to appoint the members of the first board of directors of the Palestinian Electricity Regulatory Council (PERC). This announced the start of reorganising the electricity sector in Palestine through the formation of a council to regulate and monitor all activities of the electricity sector, such as production, transportation, distribution and consumption.

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

PERC has a clear vision: "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 variety of roles and responsibilities, including

- monitoring the activities of generating, transmitting, distributing and selling electrical power within the framework the laws, rules and regulations in force;
- setting the conditions to ensure fair competition regarding the production and distribution activities of electrical power to guarantee the interests of the consumers; and
- working on the resolution of disputes between electricity distribution companies (DisCos) and customers and amongst companies in

the electricity sector to maintain the public interest.

PERC has mandatory duties to perform in the electricity sector, such as regulatory functions, operational functions, quality control, monitoring of key performance indicators (KPIs) as well as rules and duties regarding public interactions.

5.16.2 Independence

a. Political and legal independence

In line with the decision of Law No. 13 of the General Electricity Law and upon the recommendation of the cabinet, the President of Palestine issued a decree to appoint the members of the PERC Board of Directors. According to this law, PERC

- is an independent entity (financially and administratively) that is free of ministerial boundaries;
- has a separate budget according to the cabinet decision in its meeting No. 16/20;
- occupies one floor in the premises of Energy and National Resources Authority with a plan to relocate within 2–3 years; and
- has a board comprised of seven members, including the chairman; four members are the representatives of ministries (finance, energy, economy, local government) and three are representatives from the private sector. All of them are nominated by the cabinet to the

president after a recommendation from the competent ministry. The time in office for all members is four years, and their term is renewable once.

PERC makes recommendations to the Palestinian Energy Authority, a governmental body that, in turn, gets the approval of the cabinet.

b. Financial independence

PERC was funded through the 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 has asked the cabinet to amend the law so that licensing fees will be directly received by PERC.

PERC is financed by own resources and the license application fees. It submits its budget to the cabinet for endorsement, after which the amount will be deducted from the licensing fees. Its budget is approved by the Council of Ministers.

c. Functional independence

The decisions of PERC can be appealed for review at the ministry.

5.16.3 Competences

a. Access to information

PERC has full access to the financial and technical

Table 15 . PERC's formal obligations for approval

Obligations	Government	Parliament
Tariff methodology	X	
Draft budget		X

information of the sectors participants and utilities through extensive data flow, which is mandatorily requested from the regulated bodies.

b. Security and quality of supply

PERC monitors the (i) medium- and long-term supply/demand balance in the national market, (ii) expected future demand and envisaged additional capacity, (iii) quality and level of the maintenance of the networks and (iv) quality of supply. However, it does not participate in the implementation of measures for covering peak demand and addressing any shortfalls of one or more suppliers, nor does it organise, monitor or control the tendering procedures for new capacities, infrastructures or investments.

c. Market opening and market monitoring

West Bank and Gaza Strip are currently divided into four concession areas, as illustrated in the map given below. The concession areas are managed by electricity distribution companies and municipalities:

- The northern area is managed by NEDCO, and the other municipalities and local councils must join NEDCO according to the General Electricity Law No. 13.

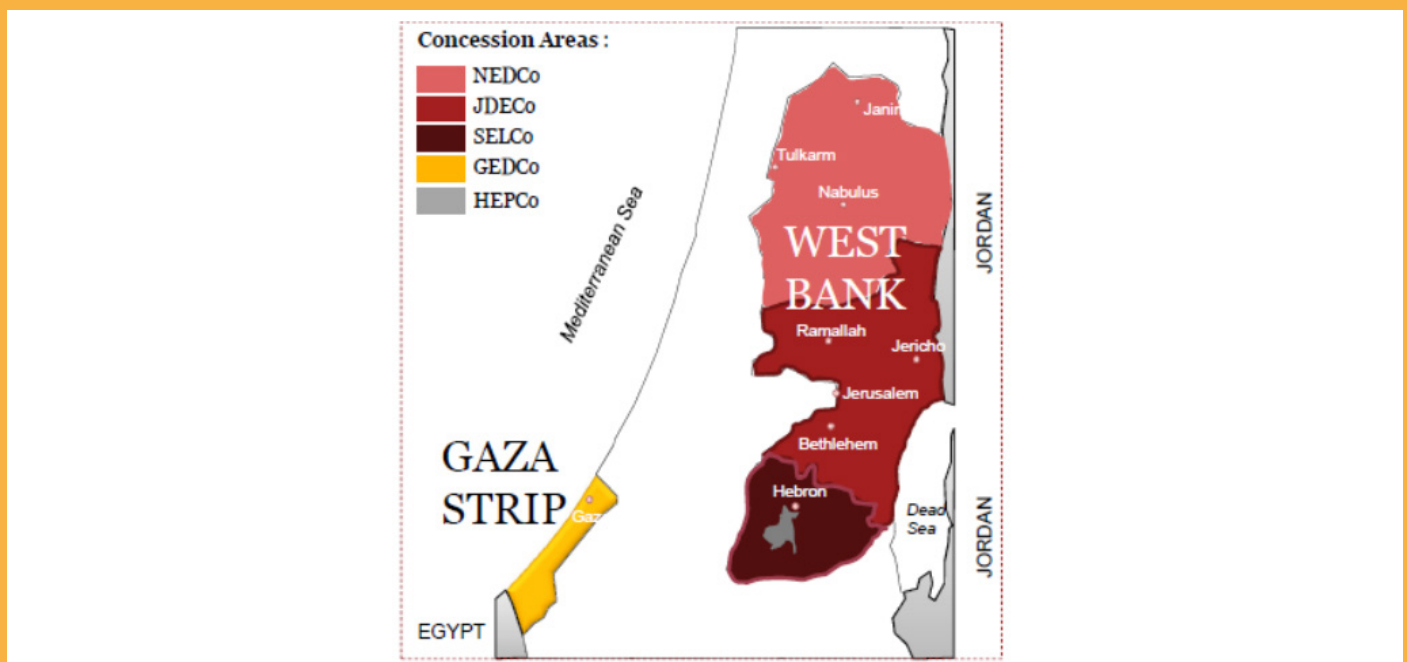
- The central area is managed only by JDECo.
- The southern area is managed by SELCo, and the other municipalities as well as the cities of Hebron and Halhul are managed by HEPCo. It is planned that they will join and form SEDCo.
- The Gaza Strip is managed by GEDCo.

These distribution companies, whose role involves pooling the electricity demand of customers and delivering the electrical current directly to the end users, are considered regulated and are 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 setting

PERC is responsible for calculating the tariffs for the transmission and distribution networks and recommending them to PENRA (Palestinian Energy and Natural Resources Authority), which is the policy maker in the sector. PERC reviews tariffs annually to match the interest of customers and companies and prevent monopoly and price control by one party over the other. More specifically, it is responsible for

Figure 31 . Concession areas



- issuing new connection fees that are more comprehensive, fair and based on unified and standardised estimates that are technically suitable and ideal;
- ensuring that all licensees and electricity distributors are applying the unified and official tariff;
- reaching a fair and suitable purchasing price of electricity from the suppliers (IEC, Jordan and Egypt);
- controlling the tariff for the local electricity generation, which complies with the market rates and the interests of all stakeholders, i.e. the generators, suppliers, transmitters, distributors and consumers; and
- amending the tariff methodology at the end of 2016 to introduce incentive-based elements rather than the existing methodology, which is based on a cost-plus principle.

e. Licensing

PERC regulates distribution companies, ensuring that they comply with the licenses' terms and maintain proper technical standards. Regarding the licenses, PERC will provide recommendations 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 the existing distribution companies. Distribution and generation can be licensed under either of the two existing regulatory approaches.

The first approach is the traditional two-step process, which requires both a construction permit and a separate operating license. The second approach is the new one-step licensing, which incorporates a combined construction and operating license. Both processes allow for 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 and improve the security and confidentiality of information. It will be designed with three key objectives in mind:

- confidentiality and security;
- ease of use; and
- improved data quality

Currently, JDECo and NEDCo are licensed by PERC, and fee collection started in 2014. The licensing, monitoring and compliance strategies are based on preparing and executing the licenses system, including designing and publishing the forms as well as the process of giving licenses and monitoring the license conditions. The average time to deliver a license is three weeks starting from the date of application.

f. Dispute settlement

PERC is responsible for dispute settlement between the industry and customers as well as between industry operators. It settles the disputes regarding grid access and TPA.

g. Unbundling

PERC establishes guidelines on the unbundling of accounts as well as rules regarding the allocation of costs resulting from the unbundling process.

h. Technical competences

PERC has the power to (i) define metering rules and charges, (ii) require transmission and distribution operators to correct any congestion difficulties, (iii) set incentive regulation and (iv) support the development of RES. Furthermore, it can set, approve or provide an opinion on the standards of service quality as well as congestion management rules and standards; however, it does not have the power to sanction or intervene in case these are violated. That falls under the purview of PENRA. With respect to investment planning and cost recovery, PERC has the power to review and provide opinion to the government on development plans.

i. Consumer protection

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

- It receives and investigates complaints and

disputes from all electricity stockholders.

- It resolve complaints and examines possible violations of rules, procedures and regulations.
- It maintains a database for complaints.
- It advertises PERC's hotline as well as the complaint procedures that both distribution utilities and consumers must follow.
- It analyses complaints for each distribution company to understand trends and major consumer difficulties.
- It will provide new complaint boxes at the north and south of West Bank, in the cities of Nablus and Hebron.
- It trains electricity utility staff on techniques for handling upset consumers.
- It handles consumer complaints.
- It conducts field visits as an essential part of the process of solving complaints.

PERC, along with the competent ministry, also has the power to address the needs of vulnerable consumers.

5.16.4 Internal organisation

PERC formulates its own procedures for adopting provisions and has the autonomy to lay down the rules governing its internal organisation, functioning and accounting procedures. The recruitment of professional and management staff involves open competition as well as the evaluation and assessment of candidates by an independent selection panel.

The board adopts a final decision regarding the procedures carried out by the selection panel, and the recruitment is ultimately carried out by the head of HR. Compensations are defined by law for the board members; the salaries are at a similar level as those of government officials but lower than those of industry officers. The terms and conditions of employees are specific for independent regulators, and their salaries are determined according to a set pay scale. They are

similar to the salaries of industry personnel but higher than those of civil servants.

There is no legal restriction on the number of staff members PERC can employ. Currently, it has 15 staff members. Its latest annual budget is \$ 994.595 (or 840.000 euros); around 38% of this is devoted to staffing costs (salaries and other staff expenses) and 3.5% is devoted to IT.

5.16.5 Enforcement

PERC has KPIs in place (technical, financial and consumer related). However, it still lacks a strong penalty system. It has the authority make recommendations to PENRA regarding the acceptance or denial of licenses as well as the renewal, withdrawal or surrender of licenses from the generation and distribution companies submitting applications to that end.

5.16.6 Transparency and accountability

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

5.17 ERSE (Portugal)

5.17.1 Legal status

The Energy Services Regulatory Authority (ERSE) is a public corporate body with the aim of regulating electricity, natural gas, LPG in all categories as well as the petroleum-derived fuels and biofuels sectors. It also handles the operations management of the electric mobility network. 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 realised 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 12 approved the new statutes of ERSE, extending its scope of regulation to the natural gas sector. Since 2016, ERSE's statutes have been revised²⁷, expanding regulation to the sectors of LPG in all its categories, petroleum-derived fuels and biofuels. In 2019, the Decree-Law No. 76/2019 approved the amendments of the legal framework that governs the activities related to electricity production, transportation, distribution and marketing and the organisation of electricity markets.

According to Law No. 67/2013 of August 28²⁸ 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 and codes), configured as an essential tool to carry out its responsibilities. Within the regulatory decision-making process, the Directorate General for Energy and Geology (DGEG) is the Portuguese public administration²⁹ 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.

5.17.2 Independence

a. Political and legal independence

ERSE has administrative and financial independence as well as organisational, functional and technical independence. It also has autonomy of management and possesses its own assets. It performs its duties independently, within the framework of the law, and is not subject to governmental supervision or oversight. Rather, it acts without prejudice to the guiding principles of the energy policy established by the government. ERSE's staff is recruited through a tender procedure like the one used for national public servants, which involves the publication of

²⁷ Decree-Law No. 57-A/2018 of 13 July.

²⁸ This law approves the framework for Portuguese regulatory authorities.

²⁹ Its mission is to contribute to the design, promotion and evaluation of policies on energy and geological resources from a perspective of sustainable development and security and guarantee of supply.

the job offer on ERSE's website and the public employment pool.

ERSE's chairman and board members are appointed by the government (Council of Ministers) for a term of six years; this is non-renewable. ERSE's staff, including the board members, cannot have be directly or indirectly employed by or have any contractual relationship with the entities involved in the regulated sectors or other entities whose activities may conflict with ERSE's duties and responsibilities. They also cannot hold any shares or interests in these entities. The staff and board members may carry out teaching or research duties, provided they are unpaid, on a part-time basis and subject to the approval by deliberation of the ERSE Board of Directors. However, when special authority is given by the board, the staff members can perform tasks in stakeholder sectors regulated by ERSE, for a fixed period of time, in the scope of the development of special projects or training in areas relevant to ERSE's activities.

The board members and division heads of ERSE must respect a two-year cooling-off period after their mandate ends. During this period, they may not be engaged with any regulated entity in the regulated sectors.

They must perform their duties on an exclusive basis, and the board's dissolution or dismissal of any of its members can occur by the resolution of the Council of Ministers based on serious lack of individual or collective responsibility; this must be determined through an independent investigation, duly preceded by the opinion of ERSE's advisory board and the competent parliamentary committee. This procedure is applied in cases of (i) unjustified failure to fulfil ERSE objectives, (ii) excessive deviation between the approved budget and its execution, (iii) serious material irregularities in the functioning of the board, (iv) serious or repeated non-compliance of laws and regulations, (v) exclusivity violation or (vi) repeated violation of confidentiality obligations. Every year, the board of directors should prepare the annual activity plan and the budget for the following year as well as the respective multiannual plan. The annual budget, the respective multi-annual plan and the opinions of the advisory board and the statutory auditor

should be forwarded for approval to the members of the government

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 the electricity and natural gas customers. Its budget is approved and implemented within the limits set by the law and is subject to the approval of the government officials responsible for finance and energy. The approval of these government officials 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 court. Administrative acts taken by ERSE in the exercise of its duties as a public authority can be appealed in administrative courts.

5.17.3 Competences

a. Access to information

ERSE's mission is to regulate the electricity and natural gas sectors as well as all categories of LPG, (namely bottled, piped or bulk LPG), petroleum-derived fuels and biofuels. It also manages the electric mobility network operations. ERSE has to be an effective tool for the efficient and

sustainable operation of the respective markets while ensuring the protection of consumers and the environment. It must carry out these duties transparently and impartially. According to ERSE's statutes, all sector participants must cooperate to facilitate the proper execution of ERSE's duties, including providing the requested information and documents. The data collected is securely stored in an in-house database.

b. Security and quality of supply

The issues of supply security are assigned to the Portuguese government, through the DGEG, a Portuguese public administration entity.

Regarding gas and electricity national systems, ERSE has the power to draw up and approve the following regulations:

- regulation on access to networks and interconnections;
- regulation on trade relations;
- tariff regulation;
- regulation on the quality of service;
- regulation on network operations; and
- regulation on infrastructure and infrastructure operation.

c. Market opening and market monitoring

The liberalisation of the Portuguese electricity

Table 16 . ERSE's formal obligations for approval

Obligations	Government	Parliament
National development plans		
Budget	X	
Annual work plan	X	
Annual activities report	X	

sector was done in a gradual, step-by-step manner, on par with the wider EU efforts to implement a single energy market. In 2006, EU Directive 2003/54/CE was transposed to the Portuguese legal framework through Decree-Law No. 29/2006, establishing the basic rules governing the functioning of the national electricity system. In 2007, the reorganisation of the natural gas business began with the liberalisation of the market. Existing companies with more than 100,000 customers were obliged to separate the distribution and commercialisation of natural gas. The market was liberalised gradually, starting with the free sale of natural gas to high-consumption customers, and was completed in 2010, with the opening of the free market to all customers.

Aside from the possibility of being able to choose their supplier, Portuguese householders may be supplied by the SoLR under transitional end-user regulated tariffs until December 31, 2020.

Market supervision is one of ERSE's strategic performance priorities, namely as regards the promotion of competition in the sector and the defence 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. This can be done 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 the national electricity and gas markets are fully opened to competition, and ERSE must monitor the (i) medium- and long-term supply/demand balance in the national market, (ii) the expected future demand and envisaged additional capacity and (iii) 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/antitrust authority.

d. Tariff setting

ERSE fixes and approves the methodologies used to establish transmission and distribution network tariffs, network tariffs, methodologies for the provision of balancing and ancillary services and access to cross-border infrastructure. It is also involved in setting the grid connection fees. The tariffs set by ERSE are cost reflective (in line with the respective tariff methodologies). ERSE can include performance-based components in the tariff methodologies and also penalise a non-performing service by reducing its rate of returns from the tariffs. In addition to the transmission and distribution activities of the electricity and gas sectors, ERSE establishes tariffs for the LNG terminal and for the underground storage of natural gas, both of which are considered to be regulated activities.

e. Licensing

ERSE has no competences in licensing. This task lies with the DGEG.

f. Dispute settlement

According to its statutes, ERSE is responsible for dispute settlement between the industry and customers as well as between industry actors.

g. Unbundling

ERSE plays a role in establishing guidelines and rules for the unbundling of the network operator as well as in and monitoring this process. It must prevent cross-subsidisation between different activities in a corporate group. According to the rules applicable, ERSE can refuse to accept costs that represent detected cross-subsidisation.

h. Technical competences

ERSE has the power to (i) set and approve rules regarding the management and allocation of interconnection capacity, (ii) issue secondary legislation, including market rules, grid codes and other technical rules, (iii) define metering

rules and charges, (iv) require transmission and distribution operators to correct any congestion difficulties and (v) grant exemptions for TPA for new investments. ERSE can set and approve both the standards of service quality and congestion management rules. Regarding network development plans, ERSE issues a non-binding opinion addressed to the government.

i. Consumer protection

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

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

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

5.17.4 Internal organisation

According to its statutes, the ERSE Board of Directors is responsible for its internal organisation. Therefore, ERSE defines its staff requirements, carries out its recruitment, approves its rules and internal regulations (including the remunerative regime and career, performance evaluation, social

protection and organisation and discipline work) and exercises the powers of directing, managing and disciplining staff. All its staff members are bound by an ethics code approved by the board. However, some decisions, such as removing and setting penalties and incentives for staff members, are subject to the restrictions of the state budget. New recruitments (i.e. for additional staff numbers) are subject to ministerial approval. The salaries of the board members are established according to specific criteria set by law, and those of the staff members are established according to professional experience/background. As of September 30, 2019, ERSE had 93 staff members – 18 supporting staff members and 75 professional staff members. Currently, ERSE has 95 staff members in total. ERSE's budget for 2019 was around 12.336.025 euros, around 66% of which was dedicated to salaries and 7.7% was devoted to IT. This corresponds to a budget of 1.62 euros per consumer.

ERSE is involved in regional regulatory associations and organisations worldwide. It cooperates actively with ARIAE, RELOP (Association of Energy Regulators of Portuguese Speaking Countries, for which ERSE is the Executive Director and Permanent Secretariat), CEER and ACER. ERSE is also a member of the OECD Network of Economic Regulators.

5.17.5 Enforcement

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

5.17.6 Transparency and accountability

ERSE's statutes, as well as all decisions within the framework of its regulatory powers, 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.

ERSE encourages the involvement of all stakeholders in the regulation process and promotes their active participation through broadened public consultation and public hearings, which are 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 the 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. It is required to report these to the government officials in charge of finance and energy. The parliament only receives the annual reports and accounts for information. ERSE publishes all the relevant information on its website, in both Portuguese and English. ERSE's communication and image office regularly updates the website through daily news and highlights and interactions with the media. The legislation is also published in *Diário da República* as well as its digital version, *Diário Eletrónico da República*.

5.18 AGEN-RS (Slovenia)

5.18.1 Legal status

The Slovenian Energy Agency (AGEN-RS) is an autonomous body that was set up in 1999 by the Energy Act, which has been amended several times after 2004. It was replaced by the 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 their activities in the field of heating and other energy gases. AGEN-RS is the only responsible entity that can issue regulatory decisions on energy issues at the national level.

Based on EU directives and regulations, AGEN-RS implemented the liberalisation 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, AGEN-RS is responsible for defining these rules and monitoring their application. According to the new Energy Act of 2014, AGEN-RS updated its organisational setting and enforced extended powers. AGEN-RS can now issue the methodology for network tariffs and sets the network prices, whereas governmental approval is no longer needed. This law has also abandoned the licensing regime for energy activities. AGEN-RS is not responsible for the authorisation of new capacities, which lies entirely with the competent ministry. Slovenia's government and the ministry responsible for energy (at present the Ministry of Infrastructure) are the policy-makers for the energy sector.

5.18.2 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.

It has six sectors in its organisational structure: (i) network activities, (ii) economic regulation, (iii) renewable energy sources, (iv) market development and monitoring, (v) legal issues and (vi) common services.

The bodies of AGEN-RS are the council and the director. The council includes four members and a president, who are appointed by the National Assembly (i.e. the parliament) at the proposal of the government. AGEN-RS is run by a director, who is nominated by the parliament upon the proposal of the council. The director is under the supervision of the council, which gives guidelines to AGEN-RS and adopts its general acts. Both the director and the council members are appointed for a six-year term following an open competition, with the possibility of one reappointment.

The Energy Act provides that, upon the proposal of the government, the National Assembly can dismiss the president or a council member in the following cases:

- The president or member requests the dismissal.

- In the performance of their duty, they have committed a serious violation of the Energy Act, an EU regulation or a general act of AGEN-RS that governs the performance of the council's tasks.
- It is established that, upon appointment, they did not fulfil all the conditions referred to in the first paragraph of the preceding article.
- They have been convicted by a final judgment of a criminal offence carrying a prison sentence of six months or more.
- They are no longer able to perform the duties of the office for health reasons.

Such a revocation has yet to take place.

The office of the director of AGEN-RS is not compatible with the offices of the president or a council member of AGEN-RS. If the president or a council member is appointed director, they must amend their status accordingly before assuming office. Moreover, the director 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 AGEN-RS;
- 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; or
- perform a service for or supply goods to a performer of energy sector activities.

No cooling-off period is foreseen after the director, president or council members of AGEN-RS finish their mandates.

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

AGEN-RS keeps accounts and draws up annual reports in accordance with the act governing the accounting of legal persons under public law.

By September 30 of a year, the council must adopt the work programme and financial plan for the next year. These include the programme of tasks that need to be carried out in the forthcoming year, the plan of financial resources required for their performance, the staff plan of the agency and the amount of compensation to be paid by the electricity and gas TSOs. Furthermore, AGEN-RS reports annually on its activities to the government and the National Assembly of the Republic of Slovenia. It submits its annual report of the previous year to the National Assembly by June 30 of each year. This annual report must be

Table 17. AGEN-RS' formal obligations for approval

Obligations	Government	Parliament
Work programme and financial plan		X
Annual activities report		X

reviewed by a certified auditor. Both reports – the one on the annual activities of the agency and the one 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 in the annual work programme and financial plan. The fees are determined based on 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 AGEN-RS' planned expenditure for the performance of its tasks.

AGEN-RS' budget and programme of work are approved by the National Assembly. The decision on such approvals will be published in the Official Gazette of the Republic of Slovenia. Supervision of the lawfulness, designated use as well as efficient and effective use of AGEN-RS' resources is carried out by the Court of Audit of the Republic of Slovenia.

c. Functional independence

All of AGEN-RS' decisions are binding. Its decisions on specific matters, such as TPA, network charges and supply conditions, can be appealed to the competent ministry, which can reject the decision but cannot amend or substitute it. AGEN-RS 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, AGEN-RS' decision is non-appealable, though an administrative dispute with AGEN-RS can be appealed to the Administrative Court of the Republic of Slovenia.

5.18.3 Competences

a. Access to information

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

It participates in the implementation of measures to manage peak demand and address suppliers' shortfalls. AGEN-RS is not responsible for controlling the 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 July 1, 2007. All consumers may choose their suppliers, although much remains under full state ownership (i.e. the TSO and DSO) or majority state ownership (generation and supply). An electricity DSO is responsible for the distribution system operation but is not the owner of the distribution networks. Five network companies (owners) are subcontracted to carry out all the activities, including physical system operation, maintenance and network investments.

Currently, there are two market forms: an organised spot exchange and a bilateral contracts market. The market operator, Borzen PLC, organised 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 open since July 2007. All consumers, including households, have the option to switch their gas supplier. All DSOs 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 the final consumers, regardless of the voltage or pressure level and kind of network they are connected to.

AGEN-RS pursues the objective of effectively opening the market to all consumers and suppliers. This includes monitoring factors that have an impact on effective competition in the electricity and natural gas markets, particularly the following:

- the provision of (i) non-discriminatory access to networks, (ii) stipulated network availability and reliability and (iii) 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 the 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, 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 households and small non-household consumers to enable a comparison of valid regular price lists of the electricity and natural gas suppliers; and
- the prevention of cross-subsidies between transmission, distribution and production activities.

With respect to matters relating to competition, AGEN-RS actively cooperates with the Slovenian financial and competition/antitrust authorities.

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 utilisation and consumer categories. Network tariffs for each consumer category are uniform across the country. Network tariff categories include voltage level, connection to substations, utilisation, seasonality, night/day use and 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 have been used since 2011. Generators are not charged for accessing the network; consumers pay 100% of the network charges. There have been no cases of refusal of access except because 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. TPA is regulated, while a price cap methodology combined with revenue cap is used for the network tariffs. AGEN-RS may also make use of performance-based components. It licenses all gas market activities separately.

AGEN-RS fixes and approves

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

AGEN-RS 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 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, after which the licensing regime was completely abandoned by the law (Energy Act).

f. Dispute settlement

AGEN-RS is responsible for managing disputes between industry actors and between industry actors and consumers. It manages complaints on grid access, TPA 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 ITO model for the gas TSO. AGEN-RS plays a role in establishing guidelines and rules for the unbundling of the network operators as well as in monitoring the unbundling process. In addition, the gas TSO is in the process of full ownership unbundling as well.

h. Technical competences

AGEN-RS has the power to (i) set rules

regarding the management and allocation of interconnection capacity according to the EU regulations, network codes and guidelines, (ii) issue secondary legislation, including market rules (under EU regulations, network codes and guidelines), grid codes and other technical rules, (iii) approve operational and planning standards, including schemes for the calculation of total transfer capacity and (iv) grant exemptions for TPA for new investment projects.

AGEN-RS has the ability to set and approve both the standards of service quality and congestion management rules (under EU regulations, network codes and guidelines), and it can intervene if these are violated. It also maintains an audited account of any revenues collected pursuant to congestion management mechanisms.

i. Consumer protection

AGEN-RS' main tasks regarding consumer issues include

- promoting a competitive, secure and environmentally sustainable internal market in electricity and natural gas;
- effectively opening this 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 non-discriminatory systems that are consumer oriented;
- ensuring that electricity and gas consumers benefit from the efficient functioning of their national market;
- facilitating high standards of public service for natural gas and electricity consumers; and
- ensuring the necessary procedures for consumer switching.

AGEN-RS provides consumers with updated information on their rights, the tools to monitor their energy consumption and prices and an

alternative dispute resolution tool. It does not have any power concerning vulnerable consumers, who are managed by a national consumer protection organisation.

AGEN-RS can also monitor the time taken by the sector participants to establish new connections and make repairs, and it can sanction them if they do not respect the time prescribed by the regulations.

5.18.4 Internal organisation

AGEN-RS can autonomously set and organise its structure and job classification. Specifically, it can determine the number of employees and the financial resources it needs. Its employees are subject to the general legislative act governing employment relationships. Their salaries are determined according to the regulations governing the salary system in the public sector, but AGEN-RS can autonomously determine the funds for special projects that require an increased workload. Any additional funds should be included in the agency's financial plan for the relevant year.

The director and staff of AGEN-RS are paid as civil servants, whereas the council members are only paid attendance fees for participating in the council meetings.

5.18.5 Enforcement

AGEN-RS has the power to sanction the sector participants by reducing the rate of return in response to violations; it can also impose additional penalties on the 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. Its council takes decisions by simple majority, with each member possessing one vote.

5.18.6 Transparency and accountability

AGEN-RS maintains regular contact 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, AGEN-RS implements a consultation process on draft resolutions. It consults stakeholders through public hearings,

written consultations, workshops and focus groups.

AGEN-RS has a reporting obligation towards the parliament. The board disseminates its decisions through a dedicated communication strategy. AGEN-RS issues a comprehensive annual report while implementing measures to protect sensitive data. It also publishes its decisions and reports on its website.

5.19 CNMC (Spain)

5.19.1 Legal status

The National Commission on Markets and Competition (Comisión Nacional de los Mercados y la Competencia; CNMC) is the Spanish 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 October 7, 2013.

The National Energy Commission (CNE) was created in 1998. The Spanish authority for markets and competition, CNMC, was created in 2013, with responsibilities in competition law enforcement and regulation, market monitoring and access conflict settlement in certain markets and sectors, including electronic communications, audio-visual, electricity and natural gas, postal, airports and railways.

CNMC merged the functions, resources and human capital of five pre-existing authorities in these fields, with CNE among them. In the field of energy, its objectives are to ensure, preserve and promote the proper functioning and transparency of the energy market as well as its effective competition for the benefit of consumers.

5.19.2 Independence

a. Political and legal independence

CNMC is a public body with its own legal personality and full public and private capacity. Therefore, it has organic and functional autonomy and full independence from the government, public administration and market players.

CNMC's board is the governing body that makes decisions, including regulation, sanctions, advisory functions, advocacy, arbitration and conflict resolution. It is made up of 10 members appointed by the government, following nominations by the Minister of the Economy, Industry and Competitiveness. The parliament may veto the appointment by absolute majority vote within one month. CNMC's commissioners are appointed from 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 six-year, non-renewable mandate. The board members and experts should comply with an incompatibility regime during their term and cannot be employed in the energy industry. The board members have a two-year cooling-off period to prevent conflicts of interest. The consequences of non-compliance involve dismissal from their position.

The board can act either in plenary sessions or in two chambers: the Competition Chamber (composed by the president and four commissioners), which deals with competition law enforcement and competition advocacy, and the Regulatory Monitoring Chamber (composed by the vice-president and four commissioners), which is in charge of regulation, monitoring and conflict resolution in electronic communications, audio-visual sector, electricity and natural gas markets, postal sector, airports 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 CNMC's budget is established by law. The budget forms part of the state budget. Each year, the commission should 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 the 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 court.

5.19.3 Competences

a. Access to information

CNMC's mission is to regulate electricity and natural gas markets, downstream oil market, telecommunications, audio-visual sector, transport and postal sector and others. It should ensure the efficient functioning of the respective markets. In this regard, CNMC has full access to the financial and technical information of the sector participants. According to the law, all

Table 18. CNMC's formal obligations for approval

Obligations	Government	Parliament
Submit opinions on supply security	X	
National development plans	X	
Draft budget	X	
Annual work plan		X
Annual activities report		X

sector participants are obliged to cooperate with CNMC to facilitate the proper execution of its duties, including the provision of the requested information and documents.

b. Security and quality of supply

CNMC monitors the (i) medium- and long-term supply/demand balance in the national energy market, (ii) expected future demand and envisaged additional capacity, (iii) quality and level of the maintenance of the networks and (iv) quality of supply. It participates in the implementation of measures to cover peak demand and to address any shortfalls of one or more suppliers.

Moreover, CNMC plays a role in prohibiting abusive practices that affect wholesale energy markets and in detecting and investigating market manipulation practices. Related to investment planning and cost recovery, CNMC gives the government its opinion on development plans.

c. Market opening and market monitoring

Market opening is an important feature of the energy markets that increases competition and, correspondingly, the service quality and customer satisfaction. National timetables for the full opening of the electricity and gas markets have already been completed.

The provision of information and its dissemination in a transparent and non-discriminatory manner are essential elements for the affirmation of efficient and competitive markets. In this context, CNMC is responsible for collecting information on market dominance as well as predatory and anti-competitive behaviour. Regarding matters related to competition, CNMC actively cooperates with EU's competition/antitrust authority.

d. Tariff setting

Before 2019, CNMC was not competent for setting tariffs or methodology. By Royal Decree-Law 1/2019, the responsibilities of CNMC in tariff setting was expanded as follows:

Concerning the economic framework, the following were approved:

- approval, through the circular, of the

methodology of access tariffs for transmission and distribution networks;

- approval, through the circular, of the methodology for setting the retribution of the regulated transmission and distribution activities as well as the retribution of the electricity system operator (REE) and gas system operator (ENAGAS); and
- approval, through an annual decision, of the values of the aforementioned access tariffs and TSOs' retribution.

Concerning network access and market rules, the following were approved:

- approval, through the circular, of the methodology of network access and connection conditions to the transmission and distribution networks of both electricity and gas (including technical and economic criteria, access request, refusal conditions, etc.); and
- approval of electricity and gas organised market rules according to the European framework.

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, which is submitted to the 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, TPA and cross-border issues.

g. Unbundling

CNMC also plays a role in utility unbundling. It draws up guidelines for compliance review and for reporting obligations regarding the unbundling process. CNMC can mandate changes in accounting practices if it determines that the sector participants are not sufficiently unbundled.

h. Technical competences

CNMC has the power to (i) set and approve rules regarding the management and allocation of interconnection capacity, (ii) issue secondary legislation, including market rules, grid codes and other technical rules and (iii) require that transmission and distribution operators correct any congestion difficulties. It can also set and approve both the standards of service quality and congestion management rules.

i. Consumer protection

Reliable, solid and well-functioning energy markets can only be achieved through consumer perception and satisfaction. Regarding the protection of consumer rights, CNMC the following responsibilities:

- It ensures compliance with the regulations and procedures established with regard to switching suppliers.
- It ensures that customers can access their consumption data.
- It identifies the agents responsible for deficiencies in the supply to customers.
- It proposes relevant measures that should be adopted.
- It provides consumers with the tools for checking or monitoring the energy prices.

CNMC has the power to monitor the time taken by the sector participants to make connections and repairs. It 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.

5.19.4 Internal organisation

CNMC's structure is defined in its organic statute, which is approved by the government. The board has the capacity to approve CNMC's internal regulations, which define the working procedures and ensures appropriate coordination among different units. CNMC's staff requirements and recruitment process design are subject to the approval of an external public body; however, recruitment decisions and internal staff allocation

are adopted by CNMC itself. Its staff is composed of two types of public employees: civil servants and employees under labour contract. These two groups are subject to different sets of working regulations.

The salaries of the board members are determined by the Ministry of Finance and Public Administration. The salaries of the civil servants are set according to the same pay-scale as in other public administrations. The salaries of the employees who are not civil servants are subject to collective bargaining. In 2016, CNMC's staff comprised of around 500 employees, and it had a budget of 59.708.890 euros, of which 52% was devoted to salaries. CNMC has a code of ethics and confidentiality, which is binding for the staff.

5.19.5 Enforcement

CNMC has the power to sanction the sector participants if they violate the law, it can utilise other enforcement mechanisms, such as compensation, license revocation and the temporary prohibition of professional activities and network access.

5.19.6 Transparency and accountability

Transparency has been one of the guiding principles of CNMC since it was created. 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 the transparency of its activities and decisions. Consequently, all provisions, decisions, agreements and reports, together with the annual report of its activities and its action plan, must be published electronically on its website.

Accountable to the parliament, CNMC is under a specific duty to present its annual report before the parliament. Every three years, CNMC should present an impact assessment of its action plans and the results obtained. CNMC's 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.

5.20 MEMRE (Tunisia)

5.20.1 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 (MEMRE), which was formerly the Ministry of Industry, Energy and Mines. MEMRE supervises STEG (Société Tunisienne de l'Electricite et du Gaz), the vertically integrated Tunisian company for electricity and gas, in the production, transport and distribution of electricity and gas.

Three more bodies undertake the tasks commonly carried out by an energy regulator:

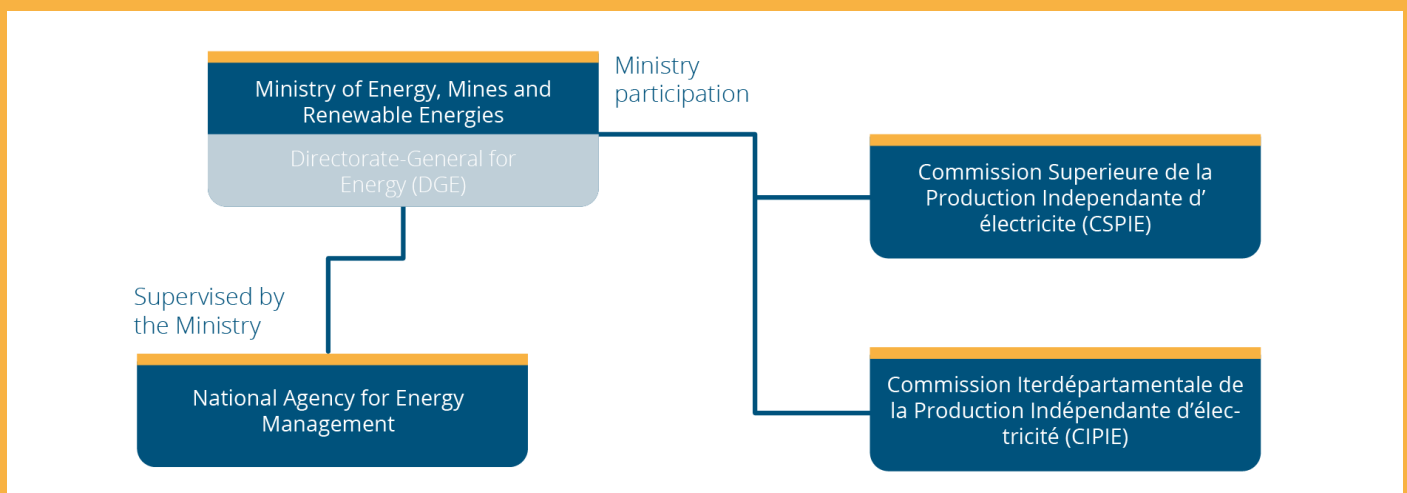
- **The National Agency for Energy Management (ANME)** was created in 1985 as a public institution of a non-administrative nature and placed under the supervision of the Ministry of Industry. The ANME was re-established by No. 2004-72 in 2004. Its activities include the design and implementation of the so-called national energy conservation programmes. 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. The 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 procedures for granting electricity concessions to 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 any other matter relating to independent power production³⁰. The CSPIE is an inter-ministerial body and is essentially in charge of choosing the concessionaire. The CSPIE and the CIPIE, which is described below, are both indirectly involved in the 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 - Interdépartementale Commission for Independent Power Production)** was also set up in 1996. Its role is complementary to the CSPIE. The CIPIE oversees the formulation of 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 negotiations with the

³⁰ Energy Country Report, TUNISIA, GSE 2013.

Figure 32 . Bodies involved in tasks typically undertaken by an energy regulator in Tunisia



selected independent producer to achieve the final agreement. This agreement should specify the characteristics of the concession, including the duration and benefits, if any, granted to the concessionaire. The participants of the CIPIE are the members of the CSPIE and the incumbent STAG.

5.20.2 Independence

a. Political and legal independence

All the bodies described above are either part of the MEMRE (Directorate General for Energy), supervised by MEMRE (ANME) or operate with the participation of MEMRE and other ministries (CSPIE and CIPIE).

b. Financial independence

All these bodies are funded through the state budget.

c. Functional independence

There is no functional independence.

5.20.3 Competences

a. Access to information

The National Energy Observatory (ONE), which operates within the Directorate General for Energy (DGE) in MEMRE is responsible for the collection of energy-related information. Thus, the ONE and, overall, the DGE must collect some technical information related to energy production and, potentially, transmission and distribution as well. It is not clear if the ministry has access to financial information from STEG or other sector participants.

b. Security and 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 any 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 the security and quality of supply are unclear. As MEMRE is generally responsible for the development of projects in the energy sector as well as the promotion of the use of new energy sources, energy savings and renewable energies, it may be inferred that it has responsibilities regarding long-term energy planning, including ensuring the long-term security of supply. The ministry's competences on the quality of electricity supply are also unclear. Again, it may be inferred that these responsibilities are entrusted directly upon STEG without the involvement of the ministry.

c. Market opening and market monitoring

The power sector is controlled by the incumbent STEG. A 2015 energy law encourages IPPs in renewable energy technologies. The law's implementing decrees and a standard PPA were published in early 2017. IPPs sell at least 70% of the energy produced directly to industrial end-users through bilateral contracts. To meet the increasing demand for electricity and promote energy conservation, the government of Tunisia (GOT) allows private companies and households utilising co-generation and renewable energy technologies to produce electricity for their own consumption and sell up to 30% of excess electricity exclusively to STEG at a fixed price. The GOT may provide grants and incentives for energy conservation and energy efficiency projects. Direct electricity sales by IPPs to STEG (in excess to the 30% level) are permitted only on a case-by-case basis³¹.

d. Tariff setting

The relevant department of MEMRE (DGE) sets up bundled electricity tariffs for all categories of consumers following STEG's proposal.

e. Licensing

Concessions are granted by the CSPIE. STEG controls 91.5% of the country's installed power production capacity and produces 81% of the electricity. The remainder is produced by Tunisia's only IPP, Carthage Power Company (CPC), a 471-MW combined-cycle power plant³².

³¹ <https://www.export.gov/apex/article2?id=Tunisia-Electrical-Power-Systems-and-Renewable-Energy>

³² <https://www.export.gov/apex/article2?id=Tunisia-Electrical-Power-Systems-and-Renewable-Energy>

f. 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 appropriate³³.

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 the interpretation and implementation of the regulations, are unclear.

g. Unbundling

The incumbent STAG remains a bundled enterprise.

h. Technical competences

There is no single law that lays out the functions of different bodies within the GOT or describes the market framework. Instead, many different decrees and laws issued over the past two decades have shaped the current structure of Tunisia's electricity sector. MEMRE has competences over five sectors: industry, technology, energy and mines. The DGE deals with all parts of the energy chain, from exploration and production of oil and gas to power generation, transmission and distribution.

MEMRE's responsibilities in the energy sector are outlined in its website as follows: "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".

MEMRE 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 and the CIPIE. The ANME has authority in the areas of energy efficiency and renewable energy. It also plays also a role in the current discussion about improved feed-in-tariffs for RES projects. As 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 the formulation of financial incentives for the establishment of such projects.

i. 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 International Monetary Fund (IMF) acknowledges that substantial efforts are being made towards the reform of energy subsidies to achieve a balance between cost reflectivity requirements and the protection of those in need.

The energy sector in Tunisia is heavily subsidised. These subsidies aim inter alia at protecting low-income consumers by ensuring affordable energy prices and at fostering industry development. Since 2010, the subsidies have sharply increased due to (i) the decrease of national energy resources, (ii) the reduction of the rent from Algerian transit gas to Italy, (iii) the drop of the local currency value and (iv) the increase in demand³⁴.

5.20.4 Internal organisation

The organisation of MEMRE includes

- a cabinet of nine bureaus supporting the minister in the decision-making process;

³⁴ The Tunisian power system and the COVID-19 pandemic, Athir Nouicer, 2020. Ref: <https://fsr.eui.eu/tunisian-power-system-and-the-covid-19-pandemic/>

³³ <https://www.export.gov/article?id=Tunisia-Dispute-Settlement>

- four directorate generals (DGs) for the so-called common services (Administrative and Financial Affairs, Organisation, Methods and Informatics, Directorate of Legal Affairs and Litigation, Directorate of Document Management and Documentation); and
- nine sectoral DGs.

The DGE is one of the nine sectoral DGs. It comprises four services. Two directorates – (i) the Directorate of Hydrocarbon Prospecting and Production and (ii) the Hydrocarbon Refining, Transportation and Distribution Directorate – are allocated to the upstream sector. One directorate – the Directorate of Electricity, Gas and Energy Efficiency – focuses on power production, transmission and distribution as well as natural gas and energy efficiency. The fourth directorate under the DGE is the ONE, which is entrusted with the task of reporting.

The ANME is organised 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 programmes etc. There are five vertical units focusing on industrial energy efficiency and the overall rational use of energy as well as renewable energy. Available online information in English and French is limited, so the specific activities of each unit cannot be further specified. There seems to be no publicly available information on the organisation of CSPIE and CIPIE.

5.20.5 Enforcement

In its 2013 assessment of the commercial laws of Tunisia, the European Bank for Reconstruction and Development (EBRD) reported that the enforcement powers of MEMRE are limited. However, no further information was found to support or contradict this statement.

5.20.6 Transparency and accountability

The ONE publishes information related to upstream production and electricity generation. Its last report available online was published in 2015.

There does not seem to be a streamlined process for consultations, neither through MEMRE's website nor through the ANME.

STEG maintains a website dedicated to residential consumers that offers information about their electricity bills and 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 documents³⁵. It is acknowledged that further transparency, particularly in relation to the calculation of tariffs and subsidies, is required.

5.21 EMRA (Turkey)

5.21.1 Legal status

Energy Market Regulatory Authority (EMRA) is an administratively and financially autonomous authority established under the Law No. 4628 of 2001. EMRA became operational less than one year after its official establishment. Within this one-year period, preparatory works such as appointment of the board members as well as the preparation and publishing of secondary laws was conducted. EMRA is the sole regulator of the 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 fulfils 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 and environment-friendly energy markets and to ensure independent regulation and supervision.

Other than EMRA, the following bodies are involved in the regulatory decision-making process:

³⁵ <https://tunisia.resourcecontracts.org/>

- Ministry of Energy and Natural Resources: It handles the technical evaluation of renewables (wind and solar) willing to connect to the power grid. It also deals with the political assessment of import and export requests through interconnections other than ENTSO-E as well as gas import and export requests. This ministry also declares Renewable Energy Zones (YEKA-zones), where renewable energy capacities are to be tendered. The legal entity winning the tender process is obliged to apply for an associate degree in EMRA within 45 calendar days. This also includes an application for a production license.
- Turkish Electricity Transmission Corp.: It conducts the connectivity assessment of new power plant applications.

5.21.2 Independence

a. Political and legal independence

The primary law provides a set of measures for ensuring the independent decision making of EMRA. EMRA's board is comprised of seven members, including the president and the second president. The latter is appointed by the president from among four-year university graduates for a four-year term that may be renewed. The 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, the board members cannot take on 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, the board members should not be employed by legal personalities subject to private law provisions and operating in the electricity, natural gas, petroleum or LPG markets or their affiliates. They also cannot be shareholders of such businesses.

EMRA's staff, including the members of the board, cannot be directly or indirectly employed by or have 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 regulated sectors. This rule also applies for their close relatives.

b. Financial independence

EMRA has its own resources independent from the central government budget. Its revenues are enlisted in the primary law, i.e. license and certificate fees, market participation fees, fines (certain percentage of), transmission surcharges, any grant awarded by international organisations and publication revenues.

The budget process is established by law and approved by the parliament. EMRA is subject to the general expenditure rules. Its unspent budget is transferred to the Ministry of Finance. Its books and accounts are deemed public property and audited by the Turkish Court of Accounts.

Table 19 . EMRA's formal obligations for approval

Obligations	Government	Parliament
Submit opinions on supply security	X	
National development plans	X	
Draft budget	X	X
Annual work plan		
Annual activities report	X	

c. Functional independence

The decision of EMRA can be appealed in the administrative courts, and while appealing, the contested decision remains in effect until a motion for stay of execution is adopted or the decision is reversed by the court.

5.21.3 Competences

a. Access to information

EMRA's mission is to regulate the electricity, natural gas and downstream oil markets and to ensure the efficient and sustainable operation of these markets by guaranteeing consumer rights and respecting the 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 the scrutiny of and operated by EMRA.

According to the primary and secondary legislation, all sector participants are obliged to cooperate with EMRA to facilitate the proper execution of its duties, including the provision of the requested information and documents. So far, EMRA has not encountered any problems concerning information access.

b. Security and quality of supply

The security of supply is the mission of the Ministry of Energy and Natural Resources. EMRA assists the ministry in fulfilling this mission. To this end, EMRA monitors the (i) medium supply/demand balance in the national market, (ii) expected future demand, (iii) quality of supply and (iv) progress of the power plants under construction. The result of the monitoring is reported to the ministry. EMRA participates in the implementation of measures to cover peak demand and addresses any shortfalls of one or more suppliers. In the natural gas market, EMRA makes a yearly demand projection in the beginning of the year and announces it to the public. Moreover, it decides on the required investment amount, taking into account reports and forecasts such as the production capacity projection and investment plans prepared by the TSO and DSO in order to strengthen the standards and level of maintenance and reliability of the transmission and distribution systems. EMRA establishes general guidelines on

the tendering process regarding distribution grid investments.

c. Market opening and market monitoring

Market opening is an important feature of the energy markets that increases competition and, correspondingly, the service quality and customer satisfaction. A precise time for fully open electricity and natural gas markets has not been determined. However, the natural gas market has been fully open except for household consumers (residential consumers) since 2012, and 75.000 m³ is the limit of the eligible consumers for these households. This threshold represents a 90% theoretical market opening degree. The electricity market is gradually opening year by year. EMRA's board lowered the eligibility limit to 1,400 kwh/year consumption for 2020, and this represents more than 95% of theoretical opening.

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 public market reports on a monthly and yearly basis.

Regarding matters related to competition, EMRA actively cooperates with the competition authority. In this regard, a cooperation protocol was signed on January 28, 2015 with the competition authority.

d. Tariff setting

The provision of reliable, adequate, high-quality, sustainable and low-cost natural gas and electricity to the consumers, the provision of financial sustainability, reasonable profitability to enable investment, support for the development of competition, non-discrimination between equal parties and transparency principles are taken as fundamental aspects in the preparation of the tariffs.

In this regard, EMRA sets out the rules and methodologies used to establish transmission and distribution network tariffs and correspondingly takes tariff proposals from licensees. The tariffs to be prepared by the relevant legal entities and the information and documents should be prepared

and submitted to the authority. Considering the financial data and tariff proposals of the relevant legal entities as well as the related market data, EMRA determines the tariffs and submits them to the board for approval. The approved tariffs are applied by the relevant legal entities throughout the tariff implementation period.

Tariff applications that are not done in accordance with the relevant procedure will not be processed until the inconformity is remedied. In such cases, the applicant will be given a written notice and the time to remedy the inconformity. If deemed appropriate, the tariff proposals should be approved by the board. If the legal entity does not file its application and/or does not remedy the inconformity in time, the relevant tariffs may be determined by the board. The tariffs that are approved or determined by the board should be publicised 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 granting, amending and revoking the licenses for market activities, including the competitive ones. The licensing requirements are set by the legislation prepared and issued by EMRA. It conducts non-discriminatory treatment while accepting and assessing license applications as per the provisions of the respective by-laws. In case the necessary procedure is completed, for electricity market, the average issuance time of a license is three months. EMRA monitors the compliance of the licensees with the license terms and conditions and reports or announces infractions to the ministry and TSO.

f. Dispute settlement

EMRA is responsible for dispute settlement among the legal entities and between legal entities and consumers. EMRA manages complaints on grid access, TPA and cross-border disputes.

g. Unbundling

EMRA plays a role in the establishment of the guidelines and rules on the unbundling of the

market activities and players. It also monitors this process. Legal entities subject to tariffs are not allowed to make cross-subsidisation between different activities in a corporate group and different market activities, and they must keep separate accounts for each activity. Furthermore, EMRA has the power to draw up guidelines for compliance review and for reporting obligations regarding the unbundling process.

h. Technical competences

EMRA has the power to (i) set and approve rules regarding the management and allocation of interconnection capacity, (ii) issue secondary legislation, including market rules, grid codes and other technical rules, (iii) define metering rules and charges, (iv) approve operational and planning standards, including schemes for the calculation of total transfer capacity, (v) require that the transmission and distribution operators correct any congestion difficulties and (vi) grant exemptions for TPA for new investments. However, exemption is not defined in the Natural Gas Market Law or its related legislation. Moreover, EMRA sets incentive regulation and supports the development of RES. EMRA has the power to enforce sanctions in case of violations.

EMRA cannot set and approve either the standards of service quality or congestion management rules. Such revenues are collected by the TSO (TEİAŞ).

i. Consumer protection

EMRA believes that reliable, solid and 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, it determines the standards, procedures and principles to be applied by the legal entities operating in the market for the services they offer to the consumers.

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, check their electricity bills and find information about their rights and obligations. EMRA regularly assesses consumer

complaints presented to the operators subject to its regulation and may order or recommend the necessary measures for their fair compensation.

EMRA does not 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 the time taken, intervene (if applicable) if this time exceeds the given time and sanction the sector participants.

5.21.4 Internal organisation

According to its statutes, EMRA's board is responsible for the definition of EMRA's internal organisation. 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 organisation) and exercises the powers of direction and management of the staff. All of its staff is bound by an ethics code approved by the board.

The salaries of the board members and staff are established according to criteria similar to that of public officials set by law. According to the law, 750 cadres are assigned to EMRA. By the end of 2019, EMRA had 509 employees assigned as follows:

- Electricity Market | 95
- Natural Gas Market | 37
- Petroleum Market | 55
- LPG Market | 27

The rest were in other departments and ancillary works.

EMRA's budget for 2019 was approximately 60 million euros, about 31% of which was dedicated to salaries. The surplus income of EMRA is transferred to the general budget.

Apart from MEDREG, EMRA is a member of the Energy Regulators Regional Association (ERRA) and observer to the ECRB. Moreover, EMRA is represented in the Steering Committee of ICER as

the Chair of Gas and Other Fuels Working Group. In ERRA, where the chairman serves as a board member, the agency representatives actively participate in ERRA's activities and have a directing effect. The staff of EMRA attends the trainings organised by ERRA both as trainees and trainers. In the committees, working groups and task forces under Black Sea Economic Cooperation (BSEC), OECD Economic Regulators Network (OECD-NER), IEA, World Trade Organization and Economic Cooperation Organization (ECO), EMRA staff is assigned in order to represent the authority and the activities of the mentioned organisations are followed.

5.21.5 Enforcement

According to EMRA's statutes, EMRA is authorised to sanction the sector participants in case of violations. It can utilise enforcement mechanisms such as compensation, the temporary prohibition of professional activities and network access, license revocation and administrative fines. EMRA can also annul the executive board and appoint new members in extreme situations. For instance, in past, a limited company was sanctioned with an administrative fine because it did not submit the capacity report to EMRA when requested, and the company's license was revoked because the report was not submitted within the given period.

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 to avoid deadlock in regulatory board decisions.

5.21.6 Transparency and accountability

EMRA's statutes and all decisions within the framework of its regulatory powers are published in the Turkish Official Gazette (Resmi Gazette). Its other non-binding decisions and announcements are available on its website. According to its statutes, EMRA publishes monthly and annual sector reports and its own annual activity report. EMRA is obliged to report periodically on its activity to the ministry.

The relevant information is published in EMRA's website only in Turkish. The English version of the website is also available. EMRA's communication office regularly updates the website with daily news, highlights and interactions with media.

6

INSTITUTIONAL ANALYSIS OF THE ENERGY TRANSITION REGULATORY CHALLENGES

6

INSTITUTIONAL ANALYSIS OF THE ENERGY TRANSITION REGULATORY CHALLENGES

6.1 Energy transition and regulatory innovation

Energy transition refers to the pathway towards the full transformation of the global energy sector from fossil-based to zero-carbon by the second half of this century. The EU has recently adopted a set of deeply transformative policies towards supplying clean, affordable and secure energy through the European Green Deal³⁶. At the global level, IRENA also notes that renewable energy and energy efficiency measures can potentially achieve 90% of the required carbon reductions³⁷. Energy transition will be enabled by information technology, smart technology, policy frameworks and market instruments. Technologies consistent with long-term energy and climate sustainability include, among others, flexible power grids, efficiency solutions, electric vehicle charging, energy storage, interconnected hydropower, biomethane as well as blue and green hydrogen produced and injected to networks or directed to transport³⁸.

The regulatory framework needs to enable the development of new business models so that the energy market can fully benefit from technological innovation and developments while ensuring a level playing field. However, reconciling smart and flexible regulation with the necessary accessibility, stability, predictability and visibility of the market actors has been already identified as a key regulatory challenge³⁹.

³⁶ Communication from the European Commission on the European Green Deal, 11 December 2019, COM (2019) 640 final.

³⁷ IRENA, "Global Renewables Outlook: Energy transformation 2050", April 2020.

³⁸ Ibid.

³⁹ CEER, "CEER's 3D Strategy (2019-2021) Digitalisation, Decarbonisation, Dynamic regulation: CEER's 3D Strategy to foster European energy markets and empower consumers",

To this end, where innovation may benefit consumers, a regulatory sandbox arrangement or other pilot projects may be advanced so that any changes to the regulatory framework can be fast tracked. A regulatory sandbox is an arrangement that allows businesses to experiment with innovative products and services, including business models and delivery mechanisms that cannot operate under the existing regulations⁴⁰. These trials generally run for a fixed period with a limited number of customers.

The motivation behind setting up a regulatory sandbox is twofold. First, to allow innovators to test new technologies and business models that are only partially compatible with the existing legal and regulatory framework. Second, to allow regulators to learn and assess the impact of specific innovations at a relatively small scale before proceeding to large-scale implementations. The regulators can then develop the right regulatory environment to accommodate them⁴¹.

As already identified by the International Energy Agency (IEA), this is a new kind of mixed policy intervention with complex governance issues between public, semi-public and private actors, where efforts have to focus on an adequate mix of innovation-oriented legislative or regulatory measures as well as project-related support mechanisms and funding instruments⁴².

Conclusions Paper, 9 January 2019, Ref: C-18-BM-124-04

⁴⁰ This should be distinguished from other system-wide innovations, an example being the case of "Pilot Regulation" in Italy. See, Luca Lo Schiavo (ARERA), "Regulation and Innovation: A suggested Taxonomy", INNOGRID 2020+, 18 June 2020, available at <https://www.innogrid2020.eu/>

⁴¹ Tim Schittekatte, "Regulatory sandboxes in the energy sector – The what, the who and the how", FSR, April 2020.

⁴² ISGAN, "Casebook on Innovative Regulatory Approaches with Focus on Experimental Sandboxes", May 2019, available at https://www.iea-isgan.org/wp-content/uploads/2019/05/ISGAN_Casebook-on-Regulatory-Sandbox-A2-1.pdf

The implications for the energy regulatory authorities arising from the undisputed need to design effective regulatory oversight and new regulatory approaches for the fast-growing diversity of new market rules, business models and market actors cannot be overlooked. In fact, to support strong, independent and efficient regulation, an appropriate level of resources for the NRAs is indispensable; this should be further supported by an effective institutional design and internal organisation to embed transparency and secure accountability in the energy transition era.

6.2 Case studies

6.2.1 Great Britain: OFGEM's Innovation Link

The Office of Gas and Electricity Market (OFGEM) realised first that to remain relevant in the face of rapid, technology-driven system changes, regulators need to harness new perspectives and tools. To this end, in 2016, OFGEM revised its strategy towards innovation and adapted its operational processes to the new model regulation⁴³.

⁴³ Ofgem: Innovation and Regulation, 7 December 2016, available at https://www.ofgem.gov.uk/system/files/docs/2016/12/ofgem_innovation_and_regulation_final2.pdf

Within this framework, OFGEM set up the Innovation Link, which is a comprehensive toolkit that offers support on energy regulation specifically to innovators looking to trial or launch new products, services, methodologies or business models. OFGEM's Innovation Link is a 'one stop shop' offering support on energy regulation to innovators.

The Innovation Link offers the following services:

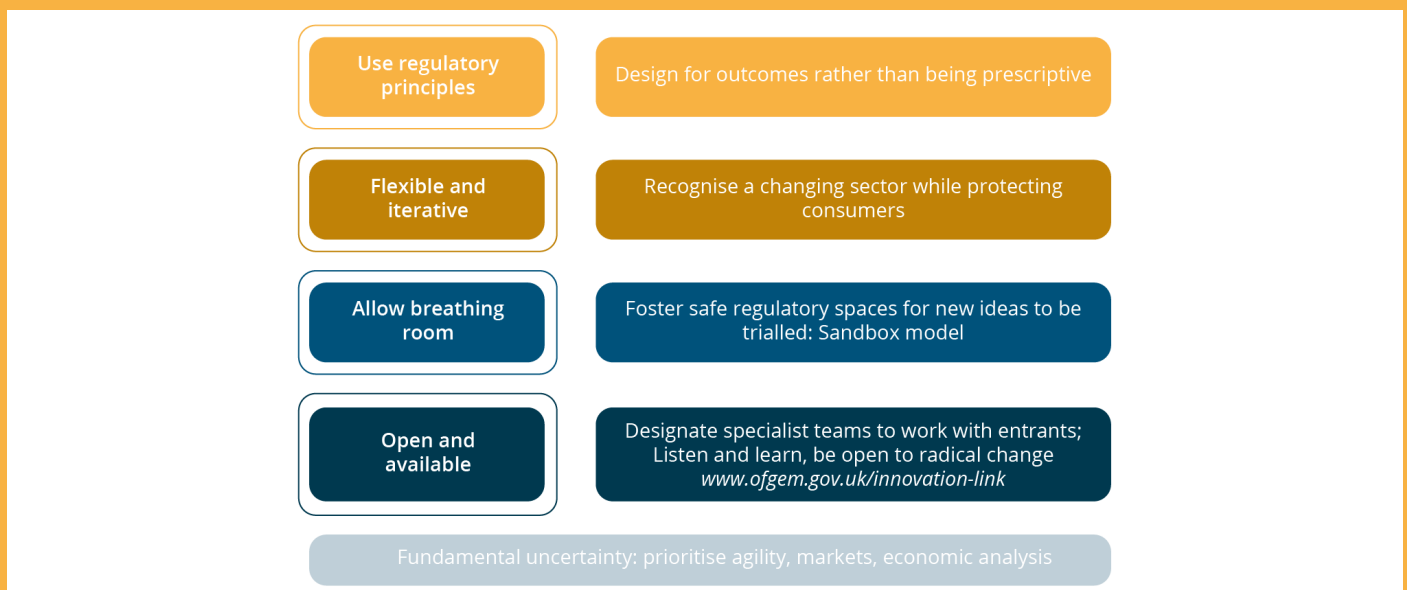
a. Fast frank feedback

This service is available to organisations that meet OFGEM's eligibility criteria:

- The proposition must be ground-breaking or significantly different.
- There is a good prospect for consumer benefit.
- The innovator can demonstrate a genuine need for support.
- Where more bespoke feedback is required, the innovator can show they have undertaken a reasonable amount of background research.

Fast frank feedback essentially

Figure 33 . New model regulation¹



¹ Martin Crouch (OFGEM), "A regulator's response to disruptive technologies and policies", VII World Forum on Energy Regulation – Regulating in a Time of Innovation, 21 March 2018.

- provides an informal steer on the regulatory implications for the innovator's proposition, although this is not a binding response;
 - helps organisations aiming to introduce an innovative product, service or business model;
 - supports businesses whose product or service has the prospect of benefitting consumers;
 - helps businesses of any size and at any stage of development;
 - assists organisations that operate, or intend to operate, in Great Britain;
 - explores the relevant regulation to help navigate the regulatory challenges innovators may face;
 - identifies regulatory barriers that may affect innovators' business model; and
 - represents innovators' views when providing input for long-term policy development.
- confirmation that a proposition is permissible; and
 - formal relief (a derogation) from a specific rule (from a license or code) that an innovator is not able to comply with.

The Verv sandbox trial project:

Repowering London, a community benefit society, has worked with residents and the Hackney Council to create Banister House Solar. To help residents access the environmental and financial benefits of renewable energy, solar panels have been fitted to the roof of Banister House. However, the solar panels currently power only the communal areas, so the residents benefit only indirectly.

This trial aims to allow the residents to benefit more directly from the solar energy by reducing the cost of their electricity. Verv and British Gas will trial a new arrangement that maximises the benefits from local generation and tests peer-to-peer electricity trading across a distributed ledger platform. The energy supplied by Banister House Solar will be traded on a software platform developed by Verv. Verv Home Hubs in the flats of the participating residents will monitor electricity consumption.

The trial allows Verv to test the practical applications of their technology, including how consumers respond to it. Verv will take on the regulatory obligations of an exempt supplier on behalf of Banister House Solar. Powervault will provide battery storage. British Gas will be the licensed electricity supplier during the trial.

The participants will receive a consolidated bill or statement from British Gas with separate lines for the electricity supplied by Banister House Solar that is traded on the Verv platform and power provided by British Gas. The customers will pay British Gas for energy supplied by them and for the energy supplied by the Verv platform as the tades occur ⁴⁴.

On the other hand, this service cannot provide financial assistance, act as a substitute to the innovators own due diligence or provide any kind of certification.

b. Regulatory sandbox

The energy regulation sandbox is a service that enables innovators to try out new ideas with guidance and support from OFGEM and other industry bodies. The sandbox helps innovators trial or bring out new products, services, business models and methodologies without some of the usual rules applying. This service is available to start-ups, new entrants, established sector players, public or third sector bodies.

The sandbox works through four primary tools:

bespoke guidance on interpreting regulations and how they might apply to an innovator's specific trial circumstances;

- comfort about OFGEM's approach to compliance and enforcement for the purposes of a trial;

⁴⁴ OFGEM, "Enabling trials through the regulatory sandbox", October 2018, available at https://www.ofgem.gov.uk/system/files/docs/2019/02/enabling_trials_through_the_regulatory_sandbox.pdf

On July 20, 2020, OFGEM announced several changes to the regulatory sandbox that have widened its remit and provided more flexibility to the innovators. Now innovators can access the service when they need it rather than fit into strict deadline windows. OFGEM expects sufficiently mature projects to apply for sandbox support, while other innovators are encouraged to seek fast frank feedback instead.

c. Guidance

Innovation Link provides a set of explanatory papers and guidance documents specifically intended to help new entrants navigate the regulatory framework and understand the different rules and regulations.

Guidance: Selling Electricity to Consumers: What Are Your Options?⁴⁵

Sleeving [peer-to-peer trading]

Sleeving is a form of commercial service offered by some suppliers. It has commonly been used by entities (corporates, public authorities, industrial and commercial facilities) with onsite generation who want to use the public distribution network to supply another of their sites or other consumers. This is sometimes called peer-to-peer trading.

The generator and the customer (they can be the same entity) agree on the terms and then secure the services of a licensed electricity supplier to transport their power over the public network. The suppliers will charge a fee for this service. The suppliers may also offer other industry services, such as providing top-up and back-up/stand-by power if the generator is short (for instance, the facilities may be offline) or selling the spill if the generator produces more power than the customer needs.

The peer-to-peer relationship operates within the parameters of the license and the industry obligations of the licensed partner supplier.

6.2.2 Australia: Regulatory sandbox arrangements to support proof-of-concept trials

At an extraordinary meeting on October 7, 2016, in response to a recent blackout, energy ministers

⁴⁵ OFGEM, "Selling Electricity to Consumers: What Are Your Options?", Guidance, 27 February 2020, available at https://www.ofgem.gov.uk/system/files/docs/2020/02/selling_energy_to_consumers_what_are_your_options_feb_2020_final_v0.23.pdf

of the Coalition of Australian Governments (COAG) agreed to an independent review of the national electricity market to take stock of its current security and reliability and to provide advice to governments on a coordinated national reform blueprint. On June 9, 2017, the so-called Finkel Review⁴⁶ made sweeping recommendations for reform of the Australian wholesale electricity market, including establishing "a framework for rapid proof-of-concept testing to demonstrate new technologies and accelerate their integration into a competitive market"⁴⁷. The Finkel Review pointed to OFGEM's sandbox mechanism as a model, although it was only one-year old at that point.

The Australian Energy Market Commission's (AEMC) final recommendation to the COAG Energy Council⁴⁸, issued on September 2019, highlights that current arrangements for facilitating proof-of-concept trials can be improved and that trials can be better facilitated and coordinated through the introduction of regulatory sandbox arrangements in the national energy markets. Several existing and new tools should be included in a regulatory sandbox toolkit to help innovative proof-of-concept trials to be conducted. Three new tools were proposed⁴⁹, with the trial proponents to be considered sequentially:

- an innovation enquiry service to provide guidance and feedback that can help facilitate trials that are feasible under current laws and regulation⁵⁰;
- a new Australian Energy Regulator (AER) regulatory waiver power, which can temporarily exempt trials from the regulatory barriers arising out of the existing rules⁵¹; and

⁴⁶ Dr Alan Finkel AO, chief scientist, was the chair of the expert panel that conducted the review.

⁴⁷ Alan Finkel et al., "Independent Review into the Future Security of the National Electricity Market – Blueprint for the Future", Commonwealth of Australia, June 2017, p. 66.

⁴⁸ AEMC, "Regulatory sandbox arrangements to support proof-of-concept trials", Final report, 26 September 2019.

⁴⁹ Implementing sandbox toolkit requires law changes by the COAG Energy Council that are still pending.

⁵⁰ The service will provide an informal steer on the energy regulatory implications for the trials of the innovative products, services and business models proposed by the guidance seekers. It will be accessible to all innovators and can provide a first step towards access to other regulatory sandbox tools. The service will not provide legal advice, binding rulings, regulatory decisions, endorsements, business incubator services or advice relating to non-energy regulatory matters. The service will be led by the AER as the first point of contact.

⁵¹ The AER may only grant a trial waiver if it is satisfied that

- a new AEMC trial rule change process that can temporarily change the existing rules or introduce a new rule of limited application to allow a trial to go ahead.

The AER highlighted in the public consultation of the above rules that, as with OFGEM, the sandbox “innovation enquiry service” and sandbox application process will require significant dedicated resourcing; therefore, they would need to adapt sandbox waiver processes to their resource availability⁵².

6.2.3 Greece: The “Smart island” pilot projects

Greece has approximately 6.000 islands and

the proposed trial project is likely to contribute to the achievement of the national electricity objective (NEO), national energy retail objective (NERO) or national gas objective (NGO). The trial must also meet the eligibility criteria specified in the rules: (i) be genuinely innovative, (ii) have the potential to lead to better services and outcomes for consumers, (iii) be unable to be conducted without a trial waiver, (iv) be appropriately limited in time, scope and scale, (v) maintain adequate consumer protections and (vi) meet any other requirements specified in the trial project’s guidelines.

⁵² AER’s comment on the AEMC’s draft rules for the regulatory sandbox arrangements to support proof-of-concept trials review, 20 February 2020, available at <https://www.aer.gov.au/system/files/AER%20-%20Submission%20on%20AEMC%20regulatory%20sandboxing%20draft%20rules%20consultation%20-%202020%20February%202020.pdf>

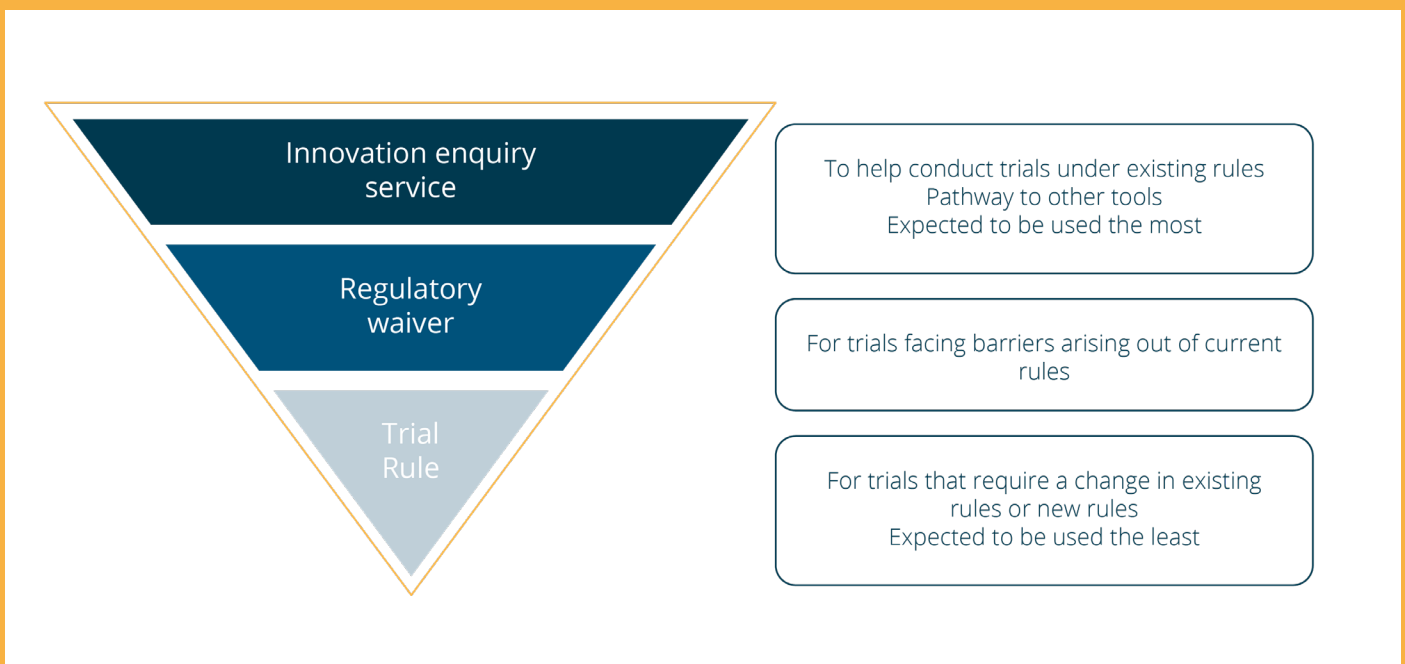
islets, of which only a small number is connected to the mainland power grid⁵³. Pursuant to Article 151 of Law 4495/2017 (Official Gazette A’ 167), to achieve higher energy penetration from RES in the electrical systems of non-interconnected islands (NIIs) while ensuring the supply of demand and the secure operation in a cost-efficient way, three special pilot projects can be implemented in three separate NIIs electrical systems. They are to be included in the operating aid regime, after a competitive bidding process conducted by the Greek regulator (RAE). These projects are implemented by the decision of the Minister of Energy, upon the recommendation of the operator (HEDNO) and the opinion of RAE.

In this framework, RAE has proposed to the Minister of Energy that three Aegean islands – Astypalaia, Megisti (Kastellorizo) and Symi – should operate as “Smart Island” pilot projects⁵⁴. They were chosen as they meet the following legal

⁵³ Following the conclusions of an expert committee for the electrification of the non-interconnected islands in Greece, RAE – with its Decision No. 785/2019 – opted for the vast majority of the inhabited Greek islands to get connected via submarine cables to the mainland power grid within the next decade, and the relevant operators were instructed to update their network development plans accordingly.

⁵⁴ This may need to be updated as by RAE Decision No. 785/2019, only Agios Efstratios, Megisti (Kastellorizo) and Gavdos are set to remain as NIIs.

Figure 34 . Overall sandbox toolkit



criteria: (i) medium-sized, (ii) offer production capacities between 5 and 10 MW and (iii) have high fuel consumption and low RES penetration. Each pilot project will consist of new RES units in combination with storage units controlled by a smart management system. The target of the “Smart Island” pilot projects is to increase RES penetration over 60% of their total electricity consumption, while ensuring the supply of demand and the secure operation of the power systems in a cost-efficient manner. The “Smart Island” pilot projects will be implemented by investors who will have to participate in tenders held by RAE.

The full application of the aforementioned scheme is still pending. However, in the framework of its internal re-organisation, RAE created a specialised unit to meet the new powers attributed to it by the legislator alongside the growing needs in RES and the energy storage innovative products and services.

6.3 Organisational adaptation to energy transition

As the traditional architecture of the energy systems and markets is being rapidly transformed to a decentralised and digitalised new paradigm at the global level, the NRAs are expected now by both the legislators and the relevant stakeholders to act as the facilitators of this transformative process.

This necessarily entails a set of new opportunities and challenges for the NRAs and may also signify the need to adapt accordingly the application of the good regulatory principles upon which the NRAs have based their organisational practice and day-to-day operations.

In this regard, from the regulatory sandbox experiences of several countries, a few distinct opportunities and challenges may be identified specifically for the NRAs:

Table 15 . NRAs Opportunities and Challenges

Opportunities	Challenges
<ul style="list-style-type: none"> • Enhanced transparency through proactive stakeholder engagement that allows the energy regulatory authorities to respond to emerging issues and opportunities. • Improved public perception of the energy regulatory authorities as proactive, solution-oriented and forward-looking public bodies. • Trials in regulatory sandboxes providing valuable evidence to help understand whether regulation should change in a more permanent form to incorporate requirements related to energy transition • Flexible internal organisation and fertile cooperation with other public agencies 	<ul style="list-style-type: none"> • No clear mandate or powers to properly address the relevant regulatory issues. • Lack of sufficient resources and/or special skills. • Energy regulatory authorities do not respond with an appropriate level of timeliness or accuracy due to other pressing commitments and thus challenges accessing expertise internally. • Stakeholder expectations exceed energy regulatory authorities’ ability to deliver on their promise. • Energy regulatory authorities focus disproportionately on responding to individual enquiries and do not invest (or do not have the resources to invest) in translating sandboxes into meaningful insight to improve broader regulatory processes.

7

CONCLUSIONS

7

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As with the 2017 Regulatory Outlook, the analysis for this edition was carried out along the MEDREG Good Regulatory Principles.

Substantial progress towards compatibility in the role and tasks of Mediterranean energy regulators is identified. The remaining issues are related mostly to compromised independence, inflexible internal organisation, limited enforcing powers and, in some cases, comparatively inadequate transparency. Some examples are given below:

- There are still countries in the Mediterranean region where there is no energy (electricity and gas) regulator separate from the relevant ministry.
- In nine countries (out of 20), the competent ministry or the government remains involved in regulatory decision making. The NRAs are still obliged to report to the government, relevant ministries and other public bodies on ongoing regulatory procedures and/or require direct approvals for a certain type of regulatory decisions.
- In most cases, the board members and chairperson of the NRAs continue to be appointed by the president or the prime minister of the country or the relevant ministry. For the most part, the board members are not selected through a public call but rather directly through a proposal by the government, ministry or other authority.
- Some NRAs do not have their own financial recourses, or their budget is in some way tied to the state budget. An NRA might have to seek approval of its budget from other public governmental bodies.
- Some NRAs still report difficulties in obtaining complete data sets from existing vertically integrated incumbents.
- Only 50% of the NRAs has competences to penalise a non-performing undertaking via a reduced rate of return over the tariffs.
- In about half of the countries, the NRAs provide only an opinion on the development plans of system operators. The power to approve them lies with the relevant ministries.
- For a minority of NRAs, the internal organisation is specified by law. The number of NRA employees is also established by law, and the NRA has no flexibility to recruit additional personnel to meet its needs if necessary.
- In several NRAs, the employees' salaries are lower than those of personnel in the energy sector and at the level of or less than the salaries of civil servants.
- Although transparency has improved and NRAs publish information on their functioning (missions, duties, organisation chart and reports) via their websites or through regular reports, not all of this information is available in English. Some NRAs still do not have an English version of their website.

Energy transition and the COVID-19 pandemic are expected to reshape the roles and tasks of the NRAs, and further empowerment may be necessary.

On the one hand, the NRAs will need to act as the facilitators of innovation and experiment with new approaches and models through regulatory sandboxes. These sandboxes will need to be carefully designed and monitored to provide valuable evidence to help understand

whether regulation should change in a more permanent form to incorporate energy transition requirements. Global experience with this form of dynamic regulation remains limited. The procedures and processes for such a testing environment are absent in most MEDREG members and will need to be developed.

On the other hand, due to COVID-19 and its adverse effects on the global economy, consumers will need to be in the centre of regulatory efforts, now more than ever. The NRAs should be further empowered to monitor market behaviour, seek transparency, impose penalties, ensure consumer protection and address energy poverty without compromising cost reflectivity.

These challenges are non-trivial as substantial needs for capital intensive infrastructure investments are already outstanding in many countries of the Mediterranean, and political interference in the context of an economic downturn can jeopardise regulatory stability.

During these challenging times, MEDREG will continue to support its members on the path towards a compatible, transparent and versatile regulatory framework designed to address the new era, always aiming towards realising an ideal future for the Mediterranean energy community.

ANNEX: LIST OF THE MAIN ABBREVIATIONS

Term	Definition
AFUR	African Forum for Utility Regulators
ACER	Agency for the Cooperation of Energy Regulators
AERF	Applied Environmental Research Foundation
CROPEX	Croatian Power Exchange
DSO	Distribution System Operator
EEZ	Exclusive Economic Zone
GGP	Guidelines of Good Practice
HR	Human Resources
IPP	Independent Power Producer
ISO	Independent System Operators
IT	Information Technology
ITO	Independent Transmission Operator
LNG	Liquefied Natural Gas
MEDREG	Mediterranean Energy Regulators
NRA	National Regulatory Authority
REM	Regional Electricity Market
REMIT	Regulation on Energy Market Integrity and Transparency
RES	Renewable Energy Sources
SoLR	Supplier of Last Resort
TPA	Third Party Access
TSO	Transmission System Operator
UfM	Union for the Mediterranean



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