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Law on Hydrocarbon Extraction in the Eastern Mediterranean Sea

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Abstract: The Eastern part of the Mediterranean, surrounded mostly by Greece, Turkey, Cyprus, Israel, Syria, Lebanon and Jordan, has recently come into the limelight of the global energy map. The discovery of hydrocarbons and gas in the Eastern Mediterranean holds the potential of being a game changer in the whole region and beyond. Oil was first discovered in the Eastern Mediterranean Sea in the 1960s, however the absence of technology allowing exploration and exploitation in such sea depths allowed only a small circle of companies to actually focus on the area. When technological development made exploitation a more visible scenario, research still remained on hold as estimated supplies were considered minimal, therefore not worth establishing a costly drilling infrastructure. In 2010 it was discovered that the Leviathan gas field was much larger than previously believed. This coincided with the discovery of the Zohr Field in 2015, a large natural gas field off the coast of Israel, developments which set the Mediterranean Sea in the global market's interest.

Key words: Hydrocarbon, Eastern Mediterranean, law, economics.

1. Introduction

However, economic activity based on extracting hydrocarbon may be hindered by the ever-lasting unrest in the area, caused mainly by longtime disputes between the states surrounding the area of interest. Both historical and current political and strategic uncertainties in the region, global competition, industry interest and geopolitical challenges shall all affect possible activities of research and extraction [1]. It is the companies involved in these activities that have to bear the cost of the investment involved and thus need to be incentivized to do so. Political whims, inter-state disputes, lack of security, difficulties in investment and inflexible regulatory frameworks may discourage companies from investing in extracting hydrocarbons.

The main legal challenge that threatens such activities in the area is the issue of jurisdiction. Which state is the one that can enjoy exclusive rights to researching the sea bottom and extracting hydrocarbons and subsequently which state shall grant these rights to private companies for a price, are the main issue to be covered by this paper along with a review of the existing international, European and domestic legal framework. And as long as this question is answered, the legal regime of such activities must be examined to conclude whether the existing international legal framework actually encourages hydrocarbon extraction and exploitation activities or only serves as a hindrance and a disincentive to investors [1, 2].

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2. The Legal Regime of Seabed Exploitation

2.1 The Continental Shelf

To determine state jurisdiction there are two main legal notions to be examined: the continental shelf and the EEZ (Exclusive Economic Zone). The first refers to the seabed and its subsoil of a coastal state extending further than its waters. The continental shelf of a coastal State comprises the submerged prolongation of the land territory of the coastal State—the seabed and subsoil of the submarine areas that extend beyond its territorial sea to the outer edge

of the continental margin, or to a distance of 200 NM (Nautical Miles) where the outer edge of the continental margin does not extend up to that distance. The continental margin consists of the seabed and subsoil of the shelf, the slope and the rise. It does not include the deep ocean floor with its oceanic ridges or the subsoil thereof. The legal definition of a state's continental shelf is provided in an international level in art. 76 of the Convention on the Law of the Sea of 1982 [2].

The legal definition of a state's continental shelf is quite complicated and far from the geological definition, a result of multiple compromises between the sovereign states that have signed the agreement (*Roukounas E.*, Public International Law, 2011,p. 298). The definition of the continental shelf provided in art. 76 of the 1982 Treaty no longer corresponded to the width of the initial definition in the Treaty of 1958, as it is a product of negotiations and political settlements. To define the continental shelf, the Treaty utilizes two criteria, the distance (and no longer the depth as in the 1958 Treaty) and the geological criterion, which supersedes exploitation. Notwithstanding the geological definition, the legal continental shelf extends in a region at least 200 miles from the baseline of the coast line. However, if the seabed of the coastal state defined in geology as a continental shelf plus the continental slope plus the continental rise, exceeds in width 200 NM and beyond the continental shelf, it is regarded as open sea.

Furthermore, apart from the legal definition, the Convention of the Law of the Sea also provides for the rights of a coastal state to enact sovereign rights towards a specific purpose, that of researching and exploiting natural resources. Those state rights exist ab initio and ipso facto (*Panagos Th.*, Research and exploitation of hydrocarbons, 2014, p. 12), without any need for declaration. They are strongly connected to state sovereignty and therefore, they are of an exclusive nature, i.e., no one can proceed with research end extraction activities without the state's prior consent. This strong connection between the ab initio character of the continental shelf and state sovereignty was highlighted in 20/02/1969 International Court of Justice ICJ case (https://www.icj-cij.org/public/files/case-related/52/052-19690220-JUD01-00-EN.pdf), regarding the continental shelf of the Northern Sea. The Court ruled that a state's rights regarding the continental shelf exist ab initio and ipso facto, as an inherent right, on the basis of state sovereignty and by extending this sovereignty, enacting sovereign rights on exploring the seabed and exploiting natural resources. No declaration or special process needs to be followed [3].

The continental shelf grants sovereign rights, i.e. specific rights attributed to a coastal state outside its territory and within the international legal framework, restricting possible sovereign extension aspirations (*Roukounas E.*, as above, p. 303). State sovereignty and sovereign rights are distinct notions, as the latter constitute rights that also enclose obligations (functional rights).

Those exclusive rights include drilling activities in search for natural resources (art. 81 of the Convention). Natural resources are defined as the metal and other, non-living organisms, i.e. organisms that exist either on the seabed or underneath it and cannot move but by physical contact with the seabed or the sea subsoil. This definition also includes hydrocarbon, therefore drilling and research activities belong to the state that exercises exclusive rights on the continental shelf [4].

2.2 The EEZ

The Treaty also introduced for the first time the concept of the EEZ, a crucial legal notion in defining jurisdiction when it comes to exploring and exploiting the seabed. An EEZ, as prescribed by the 1982 United Nations Convention on the Law of the Sea, is an area of the sea in which a sovereign state has special rights regarding the exploration and use of marine resources,

including energy production from water and wind. It stretches from the baseline out to 200 NM from the coast of the state. The difference between the territorial sea and the EEZ is that the first confers full sovereignty over the waters, whereas the second is merely a "sovereign right" which refers to the coastal state's rights below the surface of the sea.

The legal nature of the EEZ is yet to be unanimously defined by literature. It is argued (*Roukounas E.,* as above, p. 309) that the EEZ is a grid of rights and obligations set between coastal and other states, granted in the direction of sovereign rights in fishery and underwater resources protection that must also balance between the interests of various parties and the interests of the international community in the open sea.

The EEZ, contrary to what was mentioned regarding the continental shelf, does not exist ab initio and ipso facto. It needs to be declared in a typical manner and announced to the General Secretary of the United Nations, who serves as a keeper of the 1982 Treaty.

The coastal state can exercise sovereign rights in the EEZ to research, exploit, preserve or manage natural resources, above the seabed, on the seabed or underneath it. The competent coastal state can exercise its domestic legal framework while exercising the above-mentioned activities. The coastal state can also establish, within these 200 NM, facilities and infrastructure to search for or drill natural resources, such as the hydrocarbons. However, these sovereign rights granted by the Treaty are functional rights, i.e. they do not constitute soil sovereignty and must be exercised in a way that other states' relevant rights are taken into account as well [5].

Third countries can also benefit from exploiting natural resources in a coastal state's EEZ, according to the Treaty, if the coastal state does not fully exercise exploitation rights, according to provisions 61, 62 and 69, if certain requirements are met.

It must be added that the continental shelf and the EEZ are distinct notions related to each other (ICJ Libya vs. Malta case, June 1985), while it is possible for the continental shelf to exist where there is no EEZ, it is not possible for the EEZ to exist without the continental shelf.

2.3 State Disputes in the Eastern Mediterranean regarding Continental Shelf and EEZ Rights

Greece is entitled, based on the above-mentioned, to declare an EEZ up to 200 miles, the maximum possible range, since Greece's islands are also entitled to sea zones, according to art. 121 (2) of the Law of the Sea Treaty. Greece has yet to declare directly an EEZ, due to the tense disputes with Turkey. Cyprus has already declared an EEZ with the 12th section being the one currently in the spotlight, as Cyprus has attracted the attention of companies like 'Noble', 'Sheel' and 'BP company'. Turkey has recently fueled these disputes by declaring research activities on both the Cypriot EEZ and the Greek national waters and has always regarded a possible declaration of EEZ by Greece as a casus belli. Greece's lack of EEZ declaration means that hydrocarbon- related activities in the Aegean and the South Cretan Sea cannot be controlled by the Greek state, unless the area of research and drilling falls within the Greek continental shelf. This legal obstacle, along with Turkey's offensive repertoire, serves as a legal hindrance to conducting hydrocarbon activities in this part of the Mediterranean Sea.

Turkey strongly refutes a possible referral of the dispute to the ICJ, mainly because the Court's case-law precedent does not favour Turkey's standpoint. The ICJ in the case of the Saint-Pierre and Miquelon Islands, a similar case to the dispute between Turkey and Greece, but this time between Canada and France, ruled in favour of what is now the Greek State stance; the ICJ overruled Canada's argument that the islands, under French sovereign, do not have full legal rights when it comes to continental

shelf, since they are detached from the French soil. The Court ruled in favour of the full range rights of the island, a judgment that can be also applied in Kastelorizo's case. It is therefore deducted from the Court's ruling that islands not only must not necessarily be surrounded by the territorial waters, but they are also competent to produce a zone that can even exceed 200 miles (Kariotis Th., The law of the sea and the role of the EEZ on Eastern Mediterranean, in The concept of State Sovereign and Self- Disposition in International Law, 2016, p. 214-215).

Moreover, the Court in the Greenland-Jan Mayen case (June 14th 1993) also ruled that for islands to be given less rights than the main coast would contradict customary law, which recognizes to islands sea zones up to 200 miles from the line base [6].

3. The Lack of Aharmonized Legal Framework on Hydrocarbon Exploitation in the Eastern Mediterranean

3.1 Legal Attempts on an International Level

Exploiting hydrocarbons can raise several legal issues that may affect relevant business activities, from procedural issues (granting a permit to an investor to set research and drilling facilities) to environmental matters. Given the long-term disputes in the area, the states involved in such possible activities have not formed comprehensive agreements that can guarantee legal clarity.

Regarding the legal framework on hydrocarbon exploitation in the Eastern Mediterranean, Cyprus and Egypt signed in 2003 a treaty for defining the EEZ, even before Cyprus declared an EEZ in 2004. Turkey strongly protested and started claiming rights in the sea area regulated by Cyprus and Egypt, even though Turkey does not share a common border with Turkey. In 2007, Cyprus signed a likewise agreement with Libanon, with Turkey raising the tone by stating the Libanon should have consulted Turkey first before signing the agreement. Cyprus also singed a two-party treaty with Israel in December 2010 defining their sea borders. Turkey protested this agreement as well.

Based on those treaties and the declaration of the EEZ, Cyprus has declared three types of permissions for researching hydrocarbon (Kariotis Th., The law of the sea and the role of the EEZ on Eastern Mediterranean, in The concept of State Sovereign and Self- Disposition in International Law, 2016, p. 195). The first type relates to a yearly seismological and geological research and the second for three-year research. The third type relates to granting permission for 265-year long oil and gas production activities.

Apart from two-state agreements there is yet to come a unified legal framework in the area providing legal securities to possible investors in the hydrocarbon field. As of yet, only two main international legislative acts exist that regulate—partially—the energy field in the area: the MEDREG (Mediterranean Energy Regulators) and the ECT (Energy Charter Treaty). MEDREG was established in 2007 and connects energy regulators from twenty-four countries, several of which are located in the Eastern Mediterranean Sea (Greece, Cyprus, Turkey, Libya, Jordan, Palestine, Israel to name a few). This framework aims to harmonize regulation across the Mediterranean in the electricity and gas market especially concerning infrastructure investments and consumer protection (*Ernesto Bonafé*, Natural gas discoveries in the Eastern Mediterranean: Exploring regulatory and legal frameworks, p. 78). By this framework a General Assembly has been established, comprised of representatives from national regulators, responsible for defining an integrated market framework. MEDREG is also correlated with the CEER (Council of European Energy Regulators), whose contribution to the harmonization of EU energy legislation can provide guidance for the attempt commencing in the Euro-Mediterranean region. The European Commission has also issued a list of projects for integrating national energy markets (EU Reg 347/2013 of the European Parliament and of the

Council of April 17, 2013 on Guidelines for Trans-European Energy Infrastructure, OJEU L 115/39 of 25-04-2013) for dealing with issues like permit-granting procedures, one-stop shop authority and transparency in the energy field.

As far as the ECT is concerned, it is an international agreement in the energy sector adopted in 1994, alongside the Protocol on Energy Efficiency and Related Environmental Aspects. ECT serves as a common reference in the Eastern Mediterranean countries with fifty-four participants, including the European Union, member states and organizations, as well as third states like Turkey, Jordan and Syria. ECT applies to all energy forms, therefore the hydrocarbons as well, and pursues the promotion of long-term cooperation in the energy field (*Ernesto Bonafé*, as above, p. 81). It also provides for rights and obligations, dispute settlement mechanisms in investments and trade and its framework covers the entire energy chain. The most crucial aspect of this treaty is that it ensures a balance between protecting state sovereign rights and investors. Foreign investors are protected against political risks, breaching of investment agreements and war threats, through arbitration and dispute settlement mechanisms, thus providing security against the main impediments of investing in hydrocarbon exploitation in the Mediterranean region. While aiming for a common regulatory framework, the ECT does not impose on member states a model of energy market, thus respecting state sovereign rights [7].

These two frameworks, the MEDREG and the ECT, constitute brave initiatives to address the matter of legal uncertainty in the energy field in the Eastern Mediterranean; however they do not provide a resolution to the problem. States retain their right to form their own energy policies and determine conditions for exploiting national resources. Hydrocarbon extraction in the Mediterranean Region has yet to reach its full potential, and a lack of a common framework for such activities certainly affects in a negative way the commencement of such activities. Furthermore, the main hindrance remains even after these legal structures: the problem between balancing state sovereign, imperialism and investment protection. The ECT has taken a few steps towards addressing the uncertainty caused by state disputes, by establishing dispute mechanisms, however these mechanisms do not provide the security that investors seek to be persuaded to participate in researching and drilling hydrocarbon in the region [8].

3.2 The European Framework

The European framework on hydrocarbon exploitation is more advanced and comprehensive than the international. The European Union directive 94/22 EC sets out the conditions for member states in the granting and use of authorizations for the prospection, exploration and production of hydrocarbons. The directive applies to all member states, which however, retain the right to determine the areas within their respective territories to be made available for the exercise of the activities of prospecting, exploring for and producing hydrocarbons. On the other hand, Member States shall ensure that authorizations to carry out the activities above-mentioned are granted following a procedure in which all interested entities may submit applications (principle of non-discrimination).

3.3 Domestic Law on Hydrocarbon Exploitation

Researching and exploiting hydrocarbons in Greece is governed by l. 2289/1995 which provides for the necessary procedures and methods by integrating European legislation. This law was amended by l. 4001/2011, which addressed crucial issues of international law principles application and also established the Hellenic Hydrocarbon Management Company (*Panagos Th*., Research and exploitation of hydrocarbon, 2014, p. 31-32).

This legal framework sets out the procedure through which the Greek State grants its rights to seek, research and exploit hydrocarbons to a concessionaire

in a designated area. According to art. 2 of l. 2289/1995, the Greek state retains exclusively all rights to hydrocarbon research and exploitation in land, lakes or sea regions and enacts them according to the public interest. The public interest in this case includes the need for constant and secure supply, the protection of the environment, state rights and the protection of competition (*Panagos Th.*, as above, p.40-41). Any third parties wishing to exercise such activities in the Greek jurisdiction need to follow procedures to be granted these rights by the Greek State through a permit or a concession contract.

Particularly, art. 2 par. 4 l. 2289/1994 provides that the state issues an administrative act specifying the regions to undergo research or exploitation and dividing them in parts in the shape of a rectangle based on geographical factors. The right to seek hydrocarbons in this area is granted through a decision of the Hellenic Hydrocarbon Management Company, while the rights to conduct research and exploitation activities are granted through a concession agreement with the Greek state [9].

Specifically, as far as the permit is concerned, the decision of the 'HHMC company' is issued following an open invitation published in the Greek Gazette and the official EU Gazette and a ministerial approval. The invitation presents the deadline for application submissions, the terms and conditions for participating, the criteria for selecting the concessionaire, the duration of the permit to be issued and the amount of the 'LC company' to be provided as security by the participants. The invitation stage can be omitted only in cases when the permit refers to areas that are available in a permanent basis and there already exists a previous invitation that enclosed such a provision, or the region was submitted to a previous process that did not produce a concessionaire, or the region has been abandoned by the previous concessionaire. Such areas are announced through a ministerial decision and the permit includes the terms and conditions that must be met on penalty of revocation.

The HHMC grants the permit and its decision is approved by the competent minister. The region set in the permit cannot exceed 4,000 km for the land and 20,000 km for the sea. The duration of the permit cannot exceed a time period of 18 months and cannot be extended, according to the most accurate opinion (*Panagos Th.*, as above, p. 60), as current legislation does not provide for an extension procedure. This provision raises a serious threat to investment endeavors, as the permit exists under a strict timeline that cannot be extended.

As far as the rights to research and exploitation are concerned, they are granted, according to art. 2 par. 10, 17 l. 289/1995 through a lease agreement or a production sharing agreement, which means that there is a *numerous clausus* of exclusive contractual types (*Kakkava O- Th.*, Lease agreements in the field of hydrocarbon in Greece, in Energy & Law 30/2019. p. 85). In both cases there exist two stages, a stage of research and a stage of exploitation. The first cannot exceed in duration 7 years for land regions and 8 years for sea regions, while the latter the duration of 25 years, with a possibility of extension up to two fifty-year periods.

The concessionaire undertakes, through the lease agreement, all expenses and project risks if the project does not produce profit (art. 22 and 23 l. 2289/1995) and must acquire by their owns means the infrastructure and equipment required. All activities are executed based on a schedule and budget submitted to the Greek state for approval. The State is entitled to a lease amount irrespective of whether profit is actually realized, which can be agreed as a part of the hydrocarbon to be found or as a part of their value. The concessionaire retains ownership to any hydrocarbon drilled if any commercially exploitable deposit is discovered.

In the case of a production sharing agreement, the concessionaire undertakes the study and execution of hydrocarbon research and exploitation as a contractor, bearing all costs and economic risks. If a deposit of

exploitable hydrocarbons is discovered, the produced hydrocarbons and their sub-products are divided between the contractor and the state; the state retains ownership of the hydrocarbons and the contractor retains ownership only for their agreed share.

A legal question raised when reviewing both types of contracts, the lease and the production sharing agreement, is their legal nature. According to the Greek Court of Auditors case law (rulings-acts 231/2017, 147/2017, 143/2017), these contracts constitute a special type of contracts, through which the State confers to entities of private law the conducting of research on possible hydrocarbon deposits, realized through their own risk and capital, and in return the investor is entitled to exploiting the deposits to be located for a substantial time-period (*Kitsos I.,* The agreements on granting research and exploitation of hydrocarbon in the recent case-law of the Court of Auditors, in Piraeus University/ Court of Auditors, Law and Technology, 2019, p. 434). The agreements undergo the previous auditioning of the Court of Auditors competent of checking whether all legal prerequisites are met through the agreement to be signed, a process which might affect possible investments but is necessary to ensure transparency and the service of public interest [10].

Lastly, as far as dispute resolution is concerned, disputes raised between the conferring authority and the participants in the process of selecting a concessionaire, are referred to the administrative courts' jurisdiction.

3.4 The General Principles of Good Oilfield Practices and Lex Petrolea

Apart from the existing and enforceable legal framework mentioned above, the hydrocarbon exploitation activities are also governed by the generally accepted principles of Good Oilfield Practices and Lex Petrolea. Good Oilfield Practices in the field of hydrocarbon constitutes a system of non-organized systemically rules and principles or processes which govern this field, as they are generally accepted by the international oil industry and are utilized by an experienced and sensible manager while conducting hydrocarbon research and exploitation activities with safety and efficiency. This fact is also embodied in the model lease agreement set by the Greek state. LexPetrolea is a form of Good Oilfield Practice in a legal level as a special aspect of Lex Mercatoria. Lex Petrolea is defined as a constant arbitration case-law approach regarding issues that arise in an international level and refer to researching and exploiting hydrocarbons. It is a kind of customary law derived from the repentant context of relevant agreements, governing issues such as force majeure, methods for defining damages, environmental requirements, alternative dispute resolution mechanisms etc..

However, these principles, general and vague in its definition, do not provide for legal security and clarity when it comes to the obligations and requirements that must be met when conducting such activities. This is a serious legal obstacle for possible investments, especially since breaching these principles can lead to the revocation of the permit or to termination of the agreement by the Greek State, or even to liability [8-10].

4. Conclusions

As analyzed above, the legal framework for extracting and exploiting hydrocarbon is still vague and insufficient, a fact that may discourage investments in the energy field in the Eastern Mediterranean. The main challenge, however, hindering further research and drilling activities, lies with inter-state disputes, diplomacy interactions and the balance of state power within the Eastern Mediterranean (*Kosmopoulos Ch.*, Energy & Law 10/2008, 98-101). While the legal regime for jurisdiction exists, the Law of the Sea Treaty, not all countries involved have signed the agreement, with Turkey being the main adversary. Turkey's denial

towards international law creates unrest in the area, discouraging companies from investing in hydrocarbon exploitation. Furthermore, as state jurisdiction through the EEZ and the continental shelf also determines the legal framework to be applied for such activities, there exists a further struggle when the state capacity range is not clear.

Especially when it comes to Greece's rights in the Aegean Sea, the problem becomes more evident since Turkey even challenges Greek state waters, let alone the continental shelf or a possible declaration of an EEZ. A possible solution to this legal dispute would be referring to the competent judicial authorities, nonetheless, Turkey strongly refuses the referral. A more realistic and practical solution would be to refer to co-exploitation activities, jointly ventured by the states involved, especially Greece and Cyprus, along with European participation (*Kosmopoulos Ch.*, as above, p. 100-101, *Pavlides G.D*, The energy Community: towards a spherical regional cooperation in the energy field and mostly in hydrocarbons, in Hydrocarbon Law, 2015, p. 59 and following). A solution through the EU, by creating energy alliances with member states such as France, would strongly enhance Greece's and Cyprus's stand against Turkey and would ensure companies that wish to conduct research or drilling activities in the area, that they shall not be disturbed in the activities, thus, creating a secure environmental for investors.

A European solution would also address the issue of the applicable law in such activities, as a unilateral European legal framework would ensure that business activities would be conducting by the same terms and conditions in a large part of the Eastern Mediterranean. The pronciple of the European approach would be to create a common policy for the EEZ and to regard the Greek and Cypriot state EEZ as a European EEZ, therefore degrading Turkey's threats for casus belli (*Kariotis Th.*, The law of the sea and the role of the EEZ on Eastern Mediterranean, in The concept of State Sovereign and Self-Disposition in International Law, 2016, p. 209).

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