CABLE AND PIPELINE CORRIDORS UNDER THE LEGAL FRAMEWORK OF UNCLOS END THE ENERGY TREATY. GEOPOLITICAL CONSIDERATIONS AT THE EASTERN MEDETERRANEAN SEA

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Abstract

This article is divided in three sections; the first is presenting the plethora of fiber optic and power cable geographical distribution, providing to the reader an insight to underwater infrastructure. Readers can bind together the importance of survey, lay, repair and maintenance of underwater cables and pipelines, based on the legal framework provided by the Energy Treaty and UNCLOS. The second section provides a brief report on notions mentioned in the International Energy Treaty. We also mention the Energy Treaty and the Energy Treaty Charter as a case study for pipeline and power cable installations; At the third section, we focus especially at the genesis of UNCLOS with regards to the EEZ maritime zone regime; At this section, we will present the difference between the terms marine research and cable route study, based on the applicable UNCLOS conventional terminology. The last section of this article will be an effort to carefully examine whether these two Treaties are sufficient to regulate transnational cable surveying and laying operations under the current geopolitical frame in the Eastern Mediterranean Sea; as new oil and gas fields are being developed in the region two factors affect the geopolitical equilibrium: 1) The disputed EEZs in the Eastern Mediterranean, 2) The role of Turkey based on its destabilizing and revisionist stand as this is highlighted by extreme geopolitical behaviors causing the present instability in the geopolitical environment of the Eastern Mediterranean, mainly with regards to the supply of energy from discovered gas reservoirs in the Eastern Mediterranean.

Keywords: EEZ, UNCLOS, Energy Treaty, Cables, Pipelines

JEL classification: R21, R32

1. Introduction

Under the prism of the international legal framework certain geopolitical/economic factors have a specific gravity. These factors and their interactive role on the geopolitical actors of the Eastern Mediterranean that affect energy related activities consist the cornerstone of the present text. Our conclusive remark is that the geopolitical distribution of power and the resulting balance of power is now at a critical threshold making it now, more than ever, imposing the international laws a critical issue; upholding International Laws, with the consensus of the neighboring States and the transnational powers that already have concrete and solid interest in EU energy security, is promoted by maintaining the geopolitical equilibrium in the Eastern Mediterranean region.

In this article, we devoted a substantial effort in describing the legal regime established through international law for activities such as survey, lay, repair and maintenance of underwater cables and pipelines, based on the legal framework provided by the **Energy Treaty** and **UNCLOS**. We focus especially in the EEZ maritime zone regime of the Eastern Mediterranean due to existing EEZ disputes; Whereas the territorial sea of each **Coastal State** falls under the full State's jurisdiction, the submarine cables and pipelines in that zone are governed by the same legal regime applicable for land cables and pipelines. In the other maritime zones extending from 12 nautical miles seawards, UNCLOS is the only internationally recognized legal tool regulating the right to survey, lay, bury and repair a cable, also describing the right of a State to question, or, as occurs in many occasions, to

oppose such activities or undertakings. A second key point discussed in this article is the role of the **flag state** and their right to mediate in EEZ disputed areas; several examples of the flag state intervention will be discussed, especially in the Eastern Mediterranean region. We will also mention the **Energy Treaty** and the **Energy Treaty Charter** as a case study for future pipeline and power cable installations; the full concept of the application of this treaty in the Eastern Mediterranean has been understudied, up to date, most of the cases where the treaty has played a substantial role as a legal mechanism has been in the Caspian Sea, where pipeline development plans are way ahead in terms of project initialization and planning.

The concluding remark of this article will be an effort to carefully examine whether these two Treaties are sufficient to regulate transnational cable surveying and laying operations but not only; it will try to examine the current geopolitical frame of the Eastern Mediterranean Sea as new oil and gas fields are being developed in the region. Consequently, there are two questions we address and attempt to answer;

- 1. What are the high level geopolitical requirements, risks, considerations, applicable constraints and assumptions that must be considered in order to enable the energy supply from the newly found reserves of the Eastern Mediterranean route to the European Energy Market?
- 2. Are the two treaties sufficient legal framework to protect the new investments pushing aside the claims and disputes existing in the Eastern Mediterranean Seas?

Furthermore, the reader will note in the next paragraphs that it is not uncommon for Companies and States to enter different types of agreements and special international treaties, describing contractual terms under the existing legal regime that the aforementioned treaties describe in full extent. Nevertheless, due to the complicated nature of transnational interconnections, some deficiencies in the current legal framework have been identified and explained in this document.

2. What Is The Status On The Seabed Today?

2.1. Submarine Fiber Optic Cables

According to the International Cable Protection Committee (ICPC), underwater telecommunication cables hold a predominant role of over 95% of international voice and data traffic, having apparent advantages against satellite communication in respect of traffic and cost, ensuring high reliability, cost effectiveness, increasing capacity and security. Additionally, 100% of transoceanic internet traffic relies on submarine cables. The increased amount of traffic also lead several companies such as Facebook and Google to build their own subsea cable infrastructure in order to handle the amount of internet traffic.

As a matter of fact, Google has announced in 2014 that it has joined five other companies to build a trans-Pacific cable system that connects the west coast of the U.S. to the cities of Chikura and Shima in Japan. Known as FASTER, the cable system is estimated to cost \$300 million. FASTER addresses the traffic demands for broadband and mobile content on the trans-Pacific route. FASTER will be designed with 6-fiber-pair cable and optical transmission technologies with an initial capacity of 60Tb/s (100Gb/s x 100 wavelengths x 6 fiber-pairs). The other five investors in FASTER include China Mobile International, China Telecom Global, Global Transit, KDDI and SingTel. NEC, will be the system supplier for **FASTER**.

On the other hand, on the 30th May 2016, Facebook and Microsoft joined the race with a massive 4000-mile underwater cable which is just the latest of a dozen high capacity transoceanic cables being built by tech companies to deal with their insatiable demand for bandwidth.

The underwater plant will run from Virginia to a data hub in Bilbao, Spain adding on a cat's cradle of cables now belonging or funded by large tech companies rather than telecommunication companies. Currently, due to this increasing trend, data transmission by high technology companies consist of approximately 20% of the world's internet traffic.

Let's note that Google began the trend in 2010 when it invested in a cable across the Pacific between the United States and Japan called **Unity**. Google also has plans to invest in five undersea cables whereas Microsoft plans another four, Facebook two and Amazon one. Many other plans are not yet publicly announced.

Figure 1 An overview of undersea cross-border fiber optic communication cables.

Source: Alcatel - Lucent Submarine Networks

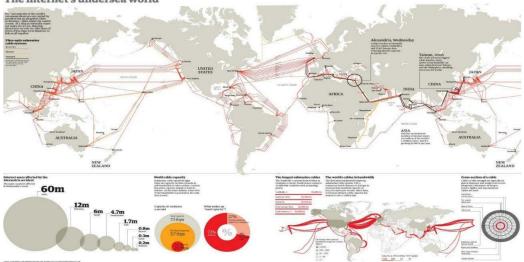
In the 20th century, telephony became the driving force for submarine cable deployments. TAT-1 was the first trans-Atlantic telephone cable installed in 1956 having the capacity to transmit 36 analog phone channels simultaneously. These days' fiber-optic submarine cables carry the bulk of the trans-oceanic voice and data traffic. In the past two decades, many of these cables have been deployed, primarily triggered by the explosive growth in Internet traffic.

The world map of cable routes shows that Europe, North America and East Asia are well connected; numerous cables connect the continents and countries. However, Africa, the Middle East and South Asia have far fewer cable systems. Looking at the available bandwidth or capacity in these cables [1], the differences become even more apparent. Faults in cables connecting these regions therefore have a higher impact than comparable faults in trans-Atlantic cables.

Although they rarely make news headlines, cable faults are not uncommon. Global Marine Systems, a company active in submarine cable installations and repairs, reported more than 50 failures in the Atlantic alone in 2007. To limit the impact of such faults, cable systems often have built-in redundancy. Ring structures, for example, cross the ocean twice, each cable segment taking a geographically different route. When one segment breaks, signals can still reach the destination over the other segment(s). Repairs can then take place without much media attention.

Figure 2. The Alexandria incident. A ship's anchor cut two cables near Alexandria, Egypt. As a result, internet capacity in Asia was reduced by 75%, mainly affecting almost 80 million internet users in India, Pakistan, Saudi Arabia, UAE, Oman, Qatar, Bahrain and Egypt.

The internet's undersea world



Map Source: http://visual.ly/internets-undersea-world

2.2. Pipelines

Modern pipelines provide is a safe and environmentally friendly method for transporting oil, gas, fluid carbon dioxide, hydrogen, gas liquids, chemicals and other material.

Additionally, they are the cheapest method of oil and gas transportation. It is expected that the demand for pipelines will continue to grow, since the traditional source fields are being depleted, as is the case of the North Sea reserves and the new sources are often landlocked, or require great transit distance (especially in the case of gas materials). I am making this reference so that we can discuss below the case of the East Med pipeline. The planned distance from Cyprus to Greece is well over 800 km, thus in case this project moves forward will become the longest pipeline ever laid until today. But we are still in the conceptual phase and many hurdles need to be overcome in order to have a feasible and viable route to connect the Israeli and Cypriot gas reserves with Europe through this route.

For the sake of discussion, the legal definition of a pipeline is a "... connected series of pipes with pumping and control devices for the conveying of liquids, gases, or finely divided solids" [2]. Submarine pipelines in the territorial waters follow same legal norms that apply to the land based pipelines. In addition to the various national laws' regulations, several international rules regulate land-based pipelines and the transit of goods through them. Some regulate open trade principles, like the General Agreement on Tariffs and Trade (GATT)[3] replaced by the World Trade Organization (WTO), which was concentrated on reducing the barriers on trade (based on tariffs, quantitative restrictions and subsidies). A comprehensive web reference for the GATT documentation is available at the CIESIN Thematic Guide (www.ciesin.org). The legal deficiencies and questions risen throughout the years, and as transnational projects were designed specifically to promote the EU energy security, the international community has devised the Energy Charter Treaty that deals specifically with the cross-boundary pipelines on a global level.

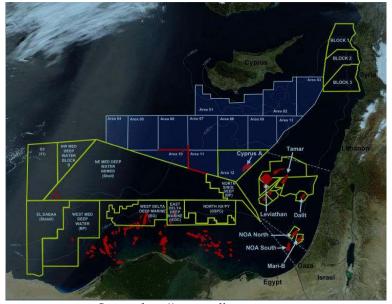


Figure 3. An overview of the Offshore Oil and Gas Blocks in the Eastern Mediterranean region

Source: http://www.radiusocean.com

2.3. Submarine Power Cable Interconnections [4]

With emerging new technologies enabling installations up to 3000m water depth, transnational power cable interconnections are expected to increase rapidly in the next decade. Since this is a rather new technological development, statistical and historical data for deep-water installations do not exist.

Power cables link countries separated by small to medium width water bodies on the same continent or at its fringes. There are a small number of intercontinental links like Spain-Morocco interconnection and the Red Sea Cable (Egypt-Jordan) but they are HVAC interconnectors and run on short distances (up to 30 km).

Most of the transmission power cables at the moment are laid in rather shallow waters, i.e. at less than 500 m depth. Only three cables go beneath this depth: HVDC Italy-Greece (1000 m), Cometa HVDC (1485 m) and SA.PE.I. (1650 m), which is the deepest in the world. The

two deepest ones were both produced by Prysmian and are of mass impregnated (MI) paper type.

The most challenging power cable interconnection in the world is now the EUROASIA Interconnector. Upon completion, this will constitute the world's deepest power cable interconnection, reaching approximately 3000m water depth, spanning between Israel, Cyprus and Greece. The project is funded by the EU under the EU Energy Security Strategic Plan and it is envisaged to be completed by 2022.

Table 3. Existing power cable interconnections

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	CABLE NAME	COUNTRIES LINKED OR INVOLVED	BODY OF WATER	POWER (MW)	VOLTAGE (KV)	SUBMARIN E LENGTH (KM)	COMMISSIONI NG YEAR		
1	NorNed	Norway, Netherlands	North Sea	700	450	580	2007		
2	SAPEI	Italy	Tyrrhenian Sea	1000	500	420	2012		
3	SACOI	Italy, France	Tyrrhenian Sea	300	200	121	1968		
4	HVDC Italy-Greece (Grita)	Italy, Greece	Ionian Sea	500	400	160	2001		
5	East-West Interconnect or	UK, Ireland	Irish Sea	500	200	186	2012		
6	BritNed	UK, Netherlands	North Sea	1000	450	240	2011		
7	SwePol	Sweden, Poland	Baltic Sea	600	450	239	2000		
8	Baltic Link	Sweden, Germany	Baltic Sea	600	450	231	1994		
9	Skagerrak I	Denmark, Norway	Baltic Sea	250	250	127	1977		
10	Skagerrak II	Denmark, Norway	Baltic Sea	250	250	127	1977		
11	Skagerrak III	Denmark, Norway	Baltic Sea	440	350	127	1993		
12	Skagerrak IV	Denmark, Norway	Baltic Sea	700	500	137	2014		
13	Cometa HVDC	Spain	Mediterranean Sea	400	250	244	2012		
14	Fennoskan1	Sweden, Finland	Gulf of Bothnia	500	400	200	1989		
15	Fennoskan2	Sweden, Finland	Gulf of Bothnia	800	500	200	2011		
16	EstLink 1	Estonia, Finland	Gulf of Finland	350	150	74	2006		
17	EstLink 2	Estonia, Finland	Gulf of Finland	650	450	145	2014		
18	Kontek	Germany, Denmark	Baltic Sea	600	400	52	1995		
19	Gotland I	Sweden	Baltic Sea	30	150	98	1954		
20	Gotland II	Sweden	Baltic Sea	130	150	92	1983		
21	Gotland III	Sweden	Baltic Sea	130	150	92	1987		

	CABLE NAME	COUNTRIES LINKED OR INVOLVED	BODY OF WATER	POWER (MW)	VOLTAGE (KV)	SUBMARIN E LENGTH (KM)	COMMISSIONI NG YEAR
22	HVDC Cross- Channel	France, UK	English Channel	2000	270	46	1986
23	HVDC Moyle	UK	Irish Sea	500	250	55	2001
24	Storebælt	Denmark	Baltic Sea	600	400	32	2010
25	Kontiskan 1	Denmark, Sweden	Kattegatt Strait	250	285	21	1965
26	Kontiskan 2	Denmark, Sweden	Kattegatt Strait	300	285	21	1988
27	Neptune Cable	US	Lower Bay	660	500	80	2007
28	Trans Bay Cable LLC	US	San Francisco	400	200	85	2010
29	Vancouver Island Pole	Canada	Strait of Georgia	312	260	33	1968
30	Vancouver Island Pole 2	Canada	Strait of Georgia	370	280	33	1977
31	Cross Sound Cable	US	Long Island Sound	330	150	39	2005
23	HVDC Leyte - Luzon	Philippines	San Bernardino Strait	440	350	21	1988
33	HVDC Hokkaidō– Honshū	Japan	Tsugaru Strait	300	250	44	1979
34	Kii Channel HVDC system	Japan	Kii Channel	1400	250	50	2000
35	HVDC Inter- Island	New Zealand	Cook Strait	1200	350	40	1965
36	Basslink	Australia	Bass Strait	500	400	290	2006

Source: (Modified after Ardelean, M., Minnebo, P.; 2015; HVDC Submarine Power Cables in the World; EUR 27527 EN; doi: 10.2790/95735)

Table 4 . Planed power cable interconnections

	CABLE NAME	COUNTRIES LINKED OR INVOLVED	BODY OF WATER	POWER (MW)	VOLTAG E (KV)	SUBMARI NE LENGTH (KM)	COMMISSIONI NG YEAR
1	Ice Link	Iceland, UK	North Sea/Atlantic	1200	N/A	1170	2022
2	NorGer	Norway, Germany	North Sea	1400	450	630	N/A
3	NSN Link	UK, Norway	North Sea	1400	N/A	711	2021

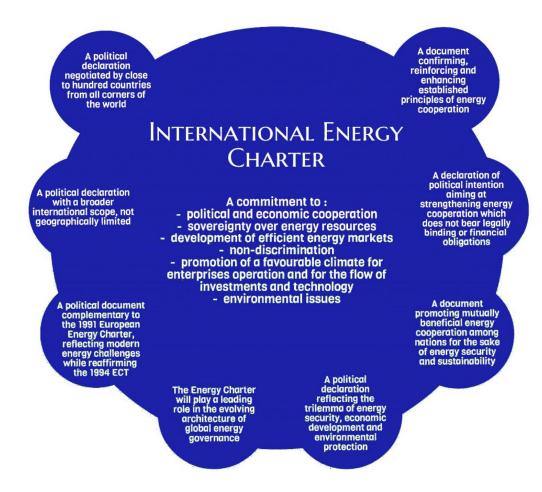
	CABLE NAME	COUNTRIES LINKED OR INVOLVED	BODY OF WATER	POWER (MW)	VOLTAG E (KV)	SUBMARI NE LENGTH (KM)	COMMISSIONI NG YEAR
4	NorthConne ct	Scotland, Norway	North Sea	1400	500	650	2025
5	Nord.Link	Norway, Germany		1400	525	500	2020
6	NordBalt HVDC	Sweden, Lithuania	Baltic Sea	700	400	400	2015
7	UK Western Link	UK	North Channel	2200	600	385	2016
8	Interconnex ion France- Angleterre (IFA 2)	France, UK	English Channel	1000	N/A	208	2020
9	Nemo Link	Belgium, UK	English Channel	1000	400	130	2019
10	Euro-Asia Interconnec tor	Israel, Cyprus, Greece	Mediterranean Sea	2000	N/A	1000	2022
11	Labrador- Island Link	Canada	Strait of Belle Isle	900	315	35	N/A
12	Maritime Link Project	Canada	Gulf of St. Lawrence	500	200	170	2017
13	HVDC Sumatra- Java	Indonesia	Malacca Strait	3000	500	35	2017
14	INDIA-SRI LANKA POWER LINK	INDIA, SRI LANKA	PALK STRAIT	1000	400	39	N/A

Source: (Modified after Ardelean, M., Minnebo, P.; 2015; HVDC Submarine Power Cables in the World; EUR 27527 EN; doi: 10.2790/95735). Please note EUROASIA Interconnection; Reconnaissance offshore survey has already been completed and pre-engineering route considerations are in place. The detailed survey is planned to commence within Q2/2017.

3. Energy Charter Treaty

3.1. Energy Charter Treaty as a legal instrument; where does it fit in the cable and pipeline industry?

In order to understand the provisions of the Energy Charter Treaty, it is necessary to mention a number of legal issues that are considered constraints "usually called showstoppers in case they are not resolved" and need to be addressed before the construction phase of the pipeline project can commence. Those include the political will of the involved States to support and oversee the project, establishment of the legal framework governing the project based on the national and international legislation and applicable rules, and legal construction of the operational phase of the project ensuring that the transit will not be unlawfully disrupted.



With respect to cross-border connections, it is imperative to underline the following considerations emerging from this treaty:

- a. The Energy Charter Treaty is a multinational legally binding instrument that deals with the transit of energy products and materials. We must note that the Energy Charter Treaty and the Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects entered into force in 1998, numbering 53 members (two of which are European Community and Euratom), with 48 ratifications (or approvals or accessions), two cases of provisional application of the Treaty (Belarus and Russian federation), and three signatories.] Greece, Cyprus and Turkey are members of the Energy Treaty and are legally bounded to apply the rules and framework of cooperation described in the ET.
- b. The Treaty's purpose is to "promote energy security through the operation of more open and competitive energy markets, while respecting the principles of sustainable development and sovereignty over energy resources".

The reader should note that submarine power cables methodology differs significantly from the pipeline construction; interconnections do not require any significant infrastructure to be laid on the seabed apart from the cable itself and a number of submarine joints, thus zeroing the role of the transit State (a State through which a cable is passing through but without landing station) with regards to "geopolitical interventions"; there are no control and metering techniques (just using a common expression here: nobody has the control to open or close a valve, as in the case of pipelines) applied by transit states. A power cable interconnection with starting point at the Sending State, crossing and EEZ of a transit State, arriving in the Receiving State, requires much lesser effort for implementation and possibly no taxation from transit states, unless otherwise specified and agreed between states, due to the application of UNCLOS legal regime in combination with the IEC, IET and EET.I

In the case of pipelines and according to Malecek [5], as described by Mudric in [6] "the main benefits that the transit states enjoy are the attraction of foreign investments (resulting in short-term and long-term creation of jobs, and possible development of domestic energy

industry) and the collection of the transit fees". Additional benefit is the strengthened national security due to the fact that other countries take interest in the peaceful political and legal environment of the transit state. Another beneficial factor to be taken into consideration are the energy needs of the transit state that can also be secured by the passing pipeline, and the energy export capabilities through the passing pipeline. However, both import and export factors can have a negative impact on the transit state, because commencing the operation of the pipeline might cause a rise in the energy prices affecting the import of energy, or, due to the opening of additional sources of energy products, the transit state that exports its own energy resources might lose some of its export income. In the case of the Eastern Mediterranean, Egypt, Cyprus and Israel are the most promising and potential export countries of natural resources to the EU supply market where a strengthened national security factor is applicable.

We shall endeavor to focus on the main legal definitions controlled by the Energy Treaty with respect to pipelines, in order to explain the rules and obligations derived by this legal instrument.

The fundamental principles of the Energy Charter Treaty are the strengthening of the rule of law on energy issues, creation of the set of rules to be respected by all members, and mitigation of the risks associated with energy-related investment and trade. The provisions of the Treaty aim to protect the foreign investment (fair and equitable conditions for investments, protection against expropriation and nationalization), ensure non-discriminatory cross-border energy transit (open and competitive market based on commercial terms, without anti-competitive behavior), establish the resolution of conflicts system, promote energy efficiency and minimize negative impact to the environment. According to the Treaty [7], the term "transit" is defined (Art 10/10(a) (i)) as the:

"Transport of goods (energy materials and products) from a country, through at least one other country, to a third country"

The transport facilities included under the provision of the Treaty (Art 10/10(b)) are: high-pressure gas transmission pipelines, high-voltage electricity transmission grids and lines, crude oil transmission pipelines, coal slurry pipelines, oil product pipelines and other fixed facilities specifically handling energy materials and products (e.g. port terminal facilities).

According to article 7/1, contracting parties have a duty (Art 7/1) to **facilitate** the transit, **ensure** that the **freedom of transit** is **respected** ("without distinction as to the origins, destination or ownership or discrimination as to pricing on the basis of such distinctions"), and **prevent unreasonable delays**, restrictions or charges.

Two features that deserve closer attention are the **negotiated Transit Protocol**, and the guidelines **for non-legally binding Model Agreements**.

3.2. What is the Transit Protocol?

The protocol is still under negotiation between the Treaty members; its aim is to elaborate the rules regarding the transit of energy products and materials mentioned in (Art 7). Especially ensuring that transit is based on transparent and non-discriminatory basis and to establish the rules for good faith during negotiations, and reasonable and non-discriminatory tariffs.

3.2.1. Current status of the Transit Protocol

As Mudric points out in [6]: "Considering the position of the European Union, the Energy Charter Conference decided on 29 November 2011 to repeal the negotiation mandate of 2009. In view of the possibility of a reset of negotiations on a new Protocol the Trade and Transit Group conducted several stakeholder consultations events on energy transit and cross-border trade to obtain expert advice. It became apparent during consultations that the provisions on energy transit continue to be highly valued by the contracting parties and are considered as unique features of the Energy Charter Treaty since no other multilateral treaty offers comparable rules.

In this direction, the Energy Charter Secretariat [8] is currently conducting broad consultations among government and industry representatives from member states as well as observers on a possible reset of negotiations on the Transit Protocol or an additional Energy Charter instrument on energy transit as a legal framework to facilitate energy trade across

borders and cooperation among energy producing, consuming and transit countries. This task is resulted from the Review under Article 34(7) in 2014, where members identified work on the implementation and enforcement of the transit provisions of the Energy Charter Treaty as a priority activity of the Energy Charter Secretariat".

Nevertheless, it would be prudent to consider another issue that may be bounding Turkey, among all the other Eastern Mediterranean countries Turkey to act per the following mandates:

"It is understood that **nothing in this Protocol shall derogate** from a Contracting Party's rights and obligations under international law, including customary international law, existing bilateral or multilateral agreements, including rules **concerning submarine cables** and pipelines.

Furthermore, it is understood that the provisions of this Protocol are subject to the conventional rules of international law. The provisions are not intended to affect the interpretation of existing international law on jurisdiction over submarine cables and pipelines or, where there are no such rules, to general international law. For the purposes of this Protocol and without prejudice to any rights or obligations of the coastal state under international law, whenever an article is applied to the Area beyond the outer limits of the territorial seas, the term Contracting Party is understood to be the Contracting Party exercising jurisdiction over the owner or operator of the Energy Transport Facilities".

With respect to Article 4: For the purposes of this Protocol, it is understood that notwithstanding Article 7(10)(b) of the Treaty, the expression "Energy Transport Facilities used for Transit" excludes "other fixed facilities" to the extent that such facilities are not necessary to secure the flow of Energy Materials and Products in Transit through high-pressure gas transmission pipelines, high-voltage electricity transmission grids and lines, crude oil transmission pipelines, coal slurry pipelines and oil product pipelines.

3.2.2. Model Agreements

Examples of implementation of different types of agreements can be found in [6]. The Energy Charter Secretariat has prepared two Model Agreements:

- (a) Model Intergovernmental Agreement; the Model Intergovernmental Agreement (IGA) is a model international treaty signed between the States involved in the pipeline project. The IGA can regulate issues such as: enactment of special legislation necessary for the implementation and operation of the pipeline project; freedom of transit; land rights approvals, question of ownership, governmental approvals and licenses, usage of equipment and personnel, tariff regime and taxation, and dispute settlement procedure.
- **(b) Model Host Governmental Treaty Agreement.** The Model Host Governmental Treaty Agreement (HGA) is a model agreement between the host government and the pipeline owner and/or investor. The HGA model deals with rights and obligations of the signatories, standards of safety, questions of liability and other issues relevant to the implementation of the project. Since the project participants (owners, operators, investors) do not participate in the IGA agreements, it is necessary for them to acquire certain rights and guarantees. Therefore, certain issues already dealt within the IGA agreement will again be regulated in the HGA agreement.

Other types of agreements may also be utilized for pipeline projects; as is the case of Baku-Tbilisi-Ceyhan.

For the next chapter, the reader must keep the following considerations derived by the Energy Treaty in mind:

- Applies to "through-transit"
- Reference to "Freedom" of transit
- 'Necessary measures to facilitate' [Art. 7(1)]
- Obligation to encourage 'relevant entities' to co-operate in modernising, developing & operating transit facilities, to mitigate supply interruptions [Art. 7(2)]
- 'Non-discrimination' [Art. 7(3)]

- Obligation not to place obstacles in the way of new capacity being established [Art. 7(4)]
- Exceptions to Art. 7 [Art. 7(5)]
- Non-interference with transit of energy materials & products Art. 7(6)
- Unique dispute settlement mechanism –compulsory conciliation

To summarize:

Treaty members are obliged to uphold the freedom of transit in the field of energy transport and the following obligations are generally accepted:

- Non-discrimination principle
- Non-interference for political or economic reasons
- Non-interruption
- Fair and reasonable tariffs, where applicable
- Notification in cases of emergencies, where applicable
- Mutual assistance

3.2.3. UNCLOS, SUBMARINE CABLES and the FLAG STATE

The legal definition of a submarine cable is: "a means of communication laid on the seabed between two terminal points".

The International Cable Protection Committee's principal objective is to provide to the industry the regulations for the protection of submarine cables from natural and man-made hazards, the supply of cable awareness programs and relevant charts and to produce a set of guidelines to assist both the cable owners and public authorities for the safeguarding of submarine cables [9]

Among the ICPC recommendations, the following apply to the right of States <u>within their jurisdictional waters:</u>

- Management of Redundant and Out-Of-Service Cables (OOS Cables);
- Recommended Routing and Reporting Criteria for Cables in Proximity to Others;
- Criteria to be Applied to the **Proposed Crossing Between Submarine** Telecommunications Cables Pipelines/Power Cables;
- Standardization of Cable Awareness Charts;
- Recommended Actions for Effective Cable Protections (Post Installation).
- Planning and Removal Considerations deal with situations where new submarine cables are laid in the position or near an Out-Of-Service cable (the same provisions apply for the subsea structures and mining of the seabed materials). A limited recovery of the OOS cables through the cooperation of the seabed users is suggested. There is no requirement provided by the UNCLOS (or customary international law) to remove the OOS cables outside of the territorial waters, as there is no full sovereign jurisdiction beyond the limits of the territorial sea. Therefore, such removal is based on the decision of the cable owners. Many pre-decision and post-decision factors can influence the cable owners to act in such a manner. This Recommendation aims to assists the cable owners in reaching a compromise in the situation of the cable crossing. A set of technical instructions is provided to assists the cable owners in choosing the right approach and methods both in communicating and executing planned crossing.
- Technical assistance document for both the submarine cables and pipelines owners whose cables and pipelines are about to cross each other. Whereas

the crossing of two cables does not necessarily require a special agreement by the parties (a simple exchange of "letters of agreement to cross" should suffice), in the case of the crossing of the cable and a pipeline, the ICPC recommends the executing of the special Crossing Agreement (Model Crossing Agreement is drafted by the ICPC). Such an Agreement should cover the issues of liabilities and rights of parties, consequential losses, construction details, maintenance plans, and mutual recognition of the parties' operations and limitations of their authority.

- Recommendations to suggest that appropriate national Hydrographic Offices should be notified every time a new cable installation has been placed, or the existing one has been moved or removed. Subsequently, these notifications should be noted on the "Cable Awareness Charts", so that all interested parties (fishermen, merchant fleets, oil & gas industry and others) would become aware of the cable presence or removal. The Recommendation provides detailed information on what these charts should consist of, depending on the target group.
- Set of instructions direct Public Authorities on how to inform the Fishing Industry about the existence of the cables and their preservation. Additionally, Military Authorities, various Commercial Entities (Oil & Gas Industry, Cable Maintenance Authorities etc.), Port Authorities, Hydrographic Offices, Local Authorities, Environmental Authorities, should all receive update information. An emphasis is placed on the development of national legislation on Cable Protection and the establishment of Cable Protection Areas. Additional measures of monitoring the cable corridors via electronic monitoring equipment (radar, vessel monitoring system), air patrol, sea patrol and terrestrial patrol are suggested.

In practice, a marine survey aims to provide all relevant information with respect to the protection of the submarine cable from shipping, fishing and other activities, and in many occasions including the risk of piracy and terrorism, usually by providing a threat and security risk assessment for the area of operations, if and when this is deemed necessary according to the work scope. Apart from the man-made hazards, the natural hazards include: submarine earthquakes, fault lines & related landslides, density currents and waves, tsunami, storms and sea level rise, other extreme weathers, icebergs and volcanic activity. According to the ICPC, around 70% of the cable faults are caused from man-made hazards (mainly fishing and anchoring, mainly in the water depths of 200m), and around 12% are caused by the natural hazards, Submarine Cable Improvement Group. For a bizarre case of an act of piracy on international submarine cables by Vietnamese fishermen, see [10].

Before the operation of construction and laying of the submarine can commence, a number of criteria needs to be satisfied in order to achieve the necessary standards of safety. It is necessary to select and conduct survey of the possible route/s, calculate impacts of the design and laying to the environment and safety, give proper notification of the position of the cable, and develop a maintaining and repair/replacement plan.

Additional measures of protection include: a cable burial in the seabed trenches (1 to 10 meters, usually in water depths to 1500 meters water depth); designation of non-anchorage areas (where the submarine cables are placed); the creation of cable protection areas (limitation of all activities (like e.g. fishing) which could potentially endanger the submarine cables); coast guard and naval patrols (preferably joint-State cooperation); radar systems, Long Range Identification and Tracking (LRIT) and Automatic Identification Systems (AIS); and, laws and regulations introducing strict penalties for infringements (including specialized laws on terrorist acts, ensuring the cooperation of States). All the afore-mentioned should also be implemented in the EEZ.

3.2.4. Cable systems outside of the territorial jurisdiction of the Coastal State – Legal regime.

Unlike in the Territorial Sea where a land legal regime of the Coastal State fully applies, in other maritime zones defined by the UNCLOS, the Coastal States cannot enforce the full

jurisdiction, but are granted certain rights. The UNCLOS provides several rules regarding laying and operation of the submarine cables63 and pipelines.64 The Convention also defines conditions necessary to be met in order to obtain the right to lay submarine cables and pipelines, and instructs Member States to adopt national legislation that imposes sanctions on those not respecting the rules.

In brief, and prior to UNCLOS, a few international legal instruments regulated the laying and subsequently the related cable survey operations. These conventions nowadays lack the scope to meet the industry demands and the technological developments. Following the first trans-oceanic laying of the cable, it became apparent that it was necessary to devise a legal instrument of protection of such cables outside of the coastal state's jurisdiction, which was, at the time, everything outside of the territorial waters (12 nautical miles). The Convention for the Protection of Submarine Telegraph Cables was adopted by more than 40 countries in Paris in 1884. This convention is still in force in countries not part of any subsequent legislation, although this is detrimental, as the conventions norms do not correspond to present needs. This convention is applicable to telegraph (obsolete) and power cables. According to this convention, the owners cannot take action until a cable is actually damaged.

Due to the efforts of the International Law Commission, on the 29 Apr 1958, the Geneva Convention on the Continental Shelf and the Geneva Convention on the High Seas took over relevant provisions of the Protection of the Submarine Cables Convention and came in to force. More importantly, the scope of the application was expanded to include the protection of the telephone cables, high-voltage power cables and submarine pipelines. Article 26 of the Convention on the High Seas recognized the right of the Coastal State to exploit its natural resources, and gave the Coastal State a right to prevent the laying of the cables and pipelines which unjustifiably interfere with that right (similarly, the Art 4 of the Convention on the Continental Shelf).

3.2.5. EEZ and Continental Shelf and High Seas

The UNCLOS adopted the Geneva Convention norms, extending them significantly, and relating any cable survey and installation activity with the EEZ and Continental Shelf legal definition. The UNCLOS Convention recognizes the right of States to lay, repair and maintain submarine cables and pipelines both in the Exclusive Economic Zone (Art 5873) and the Continental Shelf (Art 7974).

- In the EEZ, the Coastal State has rights (Art 56) regarding the exploration, exploitation, conservation and management of natural and living resources, and the activities adjunct to that zone (e.g., wind-farming). In addition, the Coastal State has a jurisdiction over artificial structures built and marine scientific research conducted in the EEZ, as well as the protection of the marine environment. Other rights of the Coastal State include the right of boarding, inspection and arrest (Art 73), and the right of imposing safety standards.
- Similarly, in the Continental Shelf, the Coastal State has the right (Art 79) to take "reasonable measures" for the exploration and exploitation of the natural resources of the seabed or subsoil, and prevention, reduction and control of pollution (this third option is, however, only reserved for the case of the pipelines, and it does not apply to the cables). Also, the Coastal State is given a right of jurisdiction over artificial structures (Art 80). If the EEZ is established above the Continental Shelf, the regime of the EEZ applies.

The owner of a cable or pipeline to be laid needs to pay due regard to other submarine cables or pipelines already in position, and in the case of pipelines, needs to obtain the Coastal State's consent regarding the delineation of the pipeline (Art 79(3)), and the conditions for the removal after its abandonment (no such consent is necessary for the cables). If necessary, prior information and negotiation with the Coastal State over the route of the cable should be conducted. In case of a conflict, the Coastal State has priority. Article 60 allows the creation of the safety zone up to 500 meters around any installation on the continental shelf to provide for safe navigation (e.g. around pumping stations).

On the High Seas, all States have a right to lay submarine cable and pipelines (Art 87(c),78 Art 11279).

This however does not imply the acquiring of the title on the seabed. Additionally, there is no possibility of establishing a safety zone. The owner of the cable or pipeline to be laid has to pay due regard to the interest of other submarine cable or pipeline already in place and prepare a crossing agreement where the technical requirements are presented to other owners. Namely, the UNCLOS establishes a duty to inform an owner of the already existing submarine cable or pipeline in the case of crossing, and an obligation of negotiation regarding the point of crossing if necessary.

Article 113 determines the obligation of the Member States to adopt in their national legislation the sanctions for the willful of culpable negligent breaking or injury to the submarine cable or pipeline, or activity that is intended to result in such breaking or injury. There is a possibility of an exclusion in a case where damage caused was necessary to preserve lives and vessels. If damage is caused, the owner of the cable that is being laid bears the costs of repair (Art 114). In case of damages beyond repair, the national law shall determine the subsequent proceedings. If a person has sustained loss whilst trying to avoid the damage to the submarine cable, UNLCOS provides the right of indemnity from the owner of that cable (Art 115). Jurisdiction in penal or disciplinary matters is set to the flag state court or the court of the state of which the person concerned is a national (Art 113).

An important addition to international regulation is the extension of the cable provisions to the high-voltage cables and pipelines.

The UNCLOS does not allow the right of visitation on the High Seas.

3.2.6. Debates on issues regarding submarine cables

3.2.6.1. Third-Party Access to Submarine Cables

The standard facility doctrine of the submarine cables dictates that the underwater cables are considered as ancillary installations to the sending station, therefore being subject to the same domestic installation of that station, and usually recognized as a chattel. Even if the Receiving State sends back the electric signals, the status of that submarine cable will not change. However, the facility doctrine can be problematic when considering third-party access and the contents, whether those are communication data or energy of any form, provided through the cable. The question of jurisdiction arises when it becomes necessary to determine which law, that of the Sending State, Receiving State or the Third-Party State will govern the intellectual property issues. Having in mind the fact that the submarine cables carry most of the international voice and data communication, it is of relevance to establish in advance which law will govern that transfer.

3.2.6.2. Project Unnecessary Delay – Abuse of Right by a Coastal State and the role of the Flag State

The Coastal State has, in the EEZ and the Continental Shelf, a right of prevention of the laying of the submarine pipelines and cables, should they prevent the Coastal States from exercising the rights of exploration and exploitation of the natural resources in those areas. Should the Flag State (survey of laying ship) wish to challenge such regulations, this is to be done through the provisions set in the Art 297 of UNCLOS. What exactly such a challenge would comprise of, is not defined by the UNCLOS, and is left to the dispute settlement system to determine in a case of a dispute. The question is on what basis can the Coastal State claim that the laying of the submarine pipeline or a cable prevents the exploration and exploitation of the resources.

Beckman suggests that «it would seem reasonable for a coastal State to impose restrictions on the laying of submarine cables in its richest fishing grounds or coral reef areas in its EEZ and to put restrictions on the laying of cables in areas designated for off-shore exploration for oil and gas" noting that "Disputes on the application and interpretation of article 79(2) could arise if a company laying a submarine cable is of the view that the laws and regulations of the coastal State restricting their right to lay submarine cables are not reasonable measures".

Additionally, before the commencing of the construction of the submarine pipeline, consent of the Coastal State is necessary. This is usually preceded by environmental and safety studies, and the study of the best possible route of the pipeline. There is however, no

limitation as to the length of these consultations and studies, nor is the Coastal State required to approve laying in a certain period. Article 300 of the UNCLOS promotes good faith in fulfilling the obligations set under the UNCLOS and prohibits the abuse of the rights determined by the UNCLOS. Accordingly, every false claim regarding the "reasonable measures" for exploration and exploitation of the resources, and every unnecessary delay of the project should be sanctioned due to the abuse or rights it constitutes. The ICJ (International Court of Justice), ITLOS (International Tribunal of the Law of the Sea) or any other arbitration (or special arbitration) should adjudicate such sanction (the same legal principle should be present in other dispute settlement forums). However, the broad variety of choice regarding the place of adjudication could potentially lead to the "forum-shopping" attempts, depending on the choice of law more favorable to the parties.

3.2.6.3. Enforcement of the UNCLOS Provisions

The ICPC endorses the ratification of the UNCLOS, and adoption of the national legislation aimed at implementing the UNCLOS provisions. However, many countries still did not ratify the Convention, or did not establish adequate domestic laws providing for effective penalties against such violations. Another interesting point is a suggestion that due to the possible heavy penalties for breaking or injury of the submarine cable, the level of compensation paid by the cable owners to the marines who work the sea bed near the cable is increased. If there is no such compensation, punitive measure can result in a refusal by fishermen to approve cable laying in their territory. In conjunction with the previously said, several UNCLOS provisions lack clarification on the specific terminology used. The Nord Stream Project is a good example of long and, in some cases, unsuccessful negotiations with prospective trans-border nations (even if only having the EEZ in mind) [(Vinogradov, 2009)]

3.2.6.4. Marine research in the EEZ – Why a cable survey is not marine research

A problematic term in the UNCLOS is "Marine research" in the EEZ. Can the seabed survey necessary for laying submarine cables and pipelines collide with the seabed mineral research, and in what conditions is the Coastal State allowed to stop or modify such an endeavor?

We should note here the scope of a cable route survey within the overall objective of an EPIC contract [EPIC: Engineering, Procurement, Installation and Commissioning]

The fundamental objectives of the cable route survey are to [12]:

- 1. Prove and document the initial route developed during initial project planning stages.
 - a. Preliminary stages for route planning are based on web resources and other historical information, thus a survey provides actual bathymetric, geophysical and geotechnical information that validate the actual data and information derived during initialization of the project.
- 2. Identify and where practical, develop the initial route to avoid obstructions and hazards found during the survey.
 - a. This stage is usually done on board the vessel and during the survey within 24 hours of data acquisition processes.
- 3. Determine final cable route engineering and cable length and cable armouring quantities
 - a. Burial feasibility, trenchability classes and soil classification parameters are estimated, along with risk assessments for burial and other cable protection parameters. Thus, the cable route survey, confirm or amend preliminary cable protection strategies, in a closer timeline to the installation process.
 - 4. Provide all data and documentation necessary to support cable installation
 - 5. Provide the database framework for system maintenance

We will present below arguments supporting that the scope of submarine cable route surveys cannot be construed as Scientific Research.

The route survey scope is not designed to perform systematic investigations into and study of the marine environment in order to establish facts and reach new conclusions about the marine environment, nor:

- To carry out exploration or exploitation of living or non-living resources
- Drill on the continental shelf

- Use explosives or harmful substances
- Construct, operate or use artificial islands, installations or structures

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NOTE: It is also obvious that the engagement of universities, scientific institutes or other governmental scientific research bodies could result in a misinterpretation and mislead Coastal States on the role of engagement of such institutions to cable route survey activities. In the opinion of the author the involvement of these institutions within EEZ disputed areas should be avoided, unless they are subcontracted by a commercial entity or form spin-off companies and engage directly in commercial activities.

3.2.6.5. Request for permit by a Coastal State

Mobilization of survey vessels in advance of all survey operational permits being issued is bad industry practice and can result in:

- 1. Inability to commence operations upon arrival on site and unreasonable delays
- 2. Dislocation of planned survey phase sequence
- 3. Vessel standby and contractual claims
- 4. Possible non-productive vessel transits that affect project timelines and milestones.
- 5. Increased costs imposing mitigation measures
- 6. Substantial overall project time shift on sequential project phases, e.g. installation vessels idle waiting on survey data and installation permits
- 7. Increasing requirement for marine operational permits in EEZs particularly for non-landing countries in "apparent" contravention of UNCLOS provisions has further negatively impacted permit lead time and project progress

All permits issued by coastal states and communicated via NAVTEX, should clearly indicate that a cable route survey is to be performed in order to gain the advantages and the legal flexibility provided under UNCLOS.

We should also note that securing permissions to carry out survey operations vary from coastal state to coastal state and from straightforward to highly complex with lead - times measured in days to possibly many months; associated conditions can include:

- Requirement for all survey team members and vessel crew to undergo security checks, especially in the Eastern Mediterranean region under its current geopolitical status
- The imposition of restrictions on certain nationalities within the survey team and/or vessel crew; and even the country where the survey contractor's company is registered. Careful examination of flag state endorsements should be accounted per coastal state regulations.
- Requirement for survey operations to be witnessed by security officers.
- Mandate for survey work be conducted by national research institutes to preagreed hand over locations
- Requirement for copies of survey data to be made available to the coastal state upon completion of the survey and/or copies of reports. This is usually a standard requirement at the close out phase of each survey project concerning submarine routing.

3.2.6.6. UNCLOS Facts

In areas, not subject to the sovereignty of the coastal State, there are no provisions in UNCLOS governing surveys on the high seas, in the EEZ or on the continental shelf. It can be argued that such surveys are a traditional freedom of the seas. When conducted in the EEZ, a

cable route survey is arguably "an internationally lawful use of the sea" related to the freedom to lay submarine cables, as provided in article 58(1) of the UNCLOS.

Part V of UNCLOS contains no provision suggesting that a coastal State has jurisdiction to regulate cable route surveys in its EEZ. Article 56(1)(b) of UNCLOS provides that in the EEZ, the coastal State has jurisdiction as provided for in the relevant provisions of this Convention regarding:

- (i) The establishment and use of artificial islands, installations and structures;
- (ii) Marine scientific research;
- (iii) The protection and preservation of the marine environment;

In the EEZ a coastal State only has "jurisdiction as provided in the relevant provisions of this Convention". It has no residual jurisdiction. Therefore, unless there is a provision in UNCLOS if a coastal State has jurisdiction over survey activities in its EEZ, or on the continental shelf, it would have no jurisdiction to pass laws and regulations on cable route surveys outside its territorial sea.

This warrants a consideration of the UNCLOS provisions in Part VI on the continental shelf. Part VI does not make a distinction between the rights and jurisdiction of the coastal State.

Article 77 provides that the coastal State has sovereign rights for the purpose of exploring the continental shelf itself as well as for the purpose of exploiting its natural resources.

On the other hand, Article 79(2) deals specifically with the laying and maintenance of submarine cables, and provides that subject to its right to take reasonable measures for the exploration of the continental shelf, the coastal State may not impede the laying of submarine cables.

4. CONCLUSIONS

- 1. A coastal State has the right to impose reasonable measures for the exploration of the continental shelf and that such measures might include adopting laws and regulations on cable route surveys. It would seem <u>reasonable</u> for the coastal State to adopt regulations to ensure that a cable route survey ship is not engaged in the exploration of the natural resources of the continental shelf and these regulations should be clearly reflected in NAVTEX notifications and the permit itself.
- 2. Cable surveys are not constituting marine scientific research surveys, so UNCLOS Article 56 and article 246 do not apply.
 - a. **UNCLOS Art 40** states clearly that "During transit passage, foreign ships, including marine scientific research and hydrographic survey ships, may not carry out any research or survey activities without the prior authorization of the States bordering straits", thus: <u>UNCLOS makes a very clear distinction between hydrographic and marine scientific research surveys</u>.
 - b. Article 19(1)(j) is also consistent with this analysis, as it mentions "research or survey activities", implying that they are separate activities.
- 3. The right of coastal States to impose conditions on cable route survey ships in maritime zones subject to their sovereignty is <u>unquestioned</u>.
- 4. Their right to impose conditions on cable route survey ships <u>is doubtful</u> if they claim that such surveys are a form of marine scientific research. However, they may have a credible argument to regulate such ships as reasonable measures relating to the exploration of the continental shelf under Article 78 and 79 of UNCLOS.
- 5. Given that the <u>continental shelf</u> is for all intents and purposes a resource zone, this may give them <u>a legitimate basis for imposing conditions</u> to ensure that the cable route survey ship is not engaging in the exploration of the natural resources of the shelf.
- 6. States have the unquestionable right to lay and operate submarine cables and pipelines.
- 7. Whereas in the territorial sea the Coastal State can determine the conditions for such laying and operation, and, impose taxes as transit fees, in the Continental Shelf and the EEZ zones, the Coastal State can only object to such undertakings if they seriously obstruct the rights of exploration and exploitation of the natural resources of those areas.

- 8. UNCLOS refers to Coastal States rights, not companies and private business, thus the flag states are the mediators in case of disputes.
- 9. Stability of the operation and legal certainty are necessary to promote huge investments necessary for the construction and commencing of such projects.
- 10. The Law of the Sea Convention and the Energy Charter Treaty aim to ensure, legal protection and undisrupted non-discriminatory flow of the energy products.
- 11. Although not all possible legal questions have been resolved by the mentioned Treaties, they provide solid and clear legal framework for the successful construction and operation of land/submarine cables and pipelines, having in mind the interests of both State and private business. It is necessary that all Member States ensure that their national legislation provides for all obligations that the named Treaties legislate
- 12. For countries that have not ratified the UNCLOS, (despite the fact of legal precedence in UNCLOS rules application, as is the case of Turkey), issues are still unclear.
- 13. It is a standard policy of all cable survey companies and cable supplies to plan projects based on the UNCLOS, recognized as the only international legal instrument regulating activities within the EEZ.
- 14. If a Coastal State denies a cable route passage/corridor due to planned oil and gas activities, oil and gas development plans should be published and disseminated through the official government's gazette. Otherwise, this can cause a possible justification for claims base on Abuse of Right by a Coastal State clauses described in the UNCLOS.

5. Geopolitical considerations at the Eastern Mediterranean Sea – The Turkish actor

According to the AKP itself and its supporters, the AKP victory in the November 2015 parliamentary elections, was followed by one word: "Stability"; when temporarily the Turkish lira picked up against dollar, equities spiked and bond yields fell.

Unfortunately, this euphoric climate was plasmatic and rapidly changed when the interest rate increased due to dollar climbing in the international market.

Turkey, in 2016, is at a threshold; it requires far-reaching reforms and international investments to keep the economy running in high levels of development. In that sense, 2016 could be considered a milestone year for the Turkish economy due to the fact that Turkey needed to proceed with constitutional changes that would create a presidential system in order to achieve the far-reaching implications.

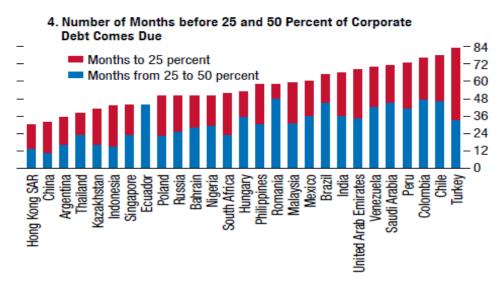
In turkey of 2016, and after the failed coup attempt, there are still two risk indicators that clearly show that the economic bubble is going to blow up soon, unless something changes rapidly:

- 1. A first look at the financial status of the Turkish telecommunication operators show a rapid increase in the outstanding payments of consumers
 - 2. During the second semester of 2016, there is a downfall in the real estate market.

In Turkey, a future collapse is obviously a matter of time. Credit cards in Turkey are bouncing and loans cannot be paid. The stability of the Turkish Banking system is under threat.

Another concern is report to the last IMF report on Turkey: Turkey is in the list of countries where due to External Imbalances they are Particularly Vulnerable to Shocks [See figure below]. Turkey continues to have significant external imbalances, despite being net oil importers. It is also mentioned that Turkey's domestic-demand driven growth leads to persistent import growth and the need to finance the current account deficit with portfolio flows exposes the economy to external shocks.

According to IMF Global Financial Stability Report, Turkey is in the late stage of the credit cycle and are faced with persistent inflationary pressures, leaving little room for monetary policy easing because of the risk that it may reinforce currency weakness.



Sources: Bloomberg, L.P.; and IMF staff calculations.

Sovereign risk perceptions appear acute in Brazil, Colombia, South Africa, and Turkey.

There is also another striking remark with regards to the Turkish society: The number of expensive phones owned by Turkish citizens is very high, especially when the prices of smartphones in Turkey is somewhat 50% more that the European markets.

Nevertheless, with this situation at hand, it is obvious that the political confrontation between the EU and Turkey will not come to a compromising solution easily. EU is - or should be - aware of a possible economic collapse of the Turkish Economy.

Turkey has been characterized by Morgan Stanley in 2013, as one of the "5 fragile" emerging market countries most likely to be affected by foreign investments. The account deficit of 5% needs considerable **external financing**. GDP per capita is stagnating at circa 10.000 USD, thus caught in what we could call the "middle income trap". Turkey is also suffering [and will suffer even more in the near future] of qualified graduates, lack of competence of the workforce with higher education. Having been in the Oil and Gas industry, a striking remark is usually made by colleagues in the social media: Turkey does not have qualified air gun mechanics or data processors in the international market, no one has ever heard of Turk engineers or data processors in the industry, despite the fact that TPAO purchased the most sophisticated equipment and vessels the last decade. Up to now, the Turkish work force in the Oil and Gas industry seems to be rather limited. I have limited knowledge of other technological areas, but a few facts, regarding the Turkish economy are presented below:

The most critical economic activity in Turkey is real estate and the construction industry, supported mostly from a loose credit policy of Turkish Banks. After all the real estate lobby, has supported AKP strongly in the past years. In order to support the two indicators presented above, this is where Turkey stands: Erdogan recently announced to the public that banks taking measures against customers with outstanding payments will be considered "traitors".

Obviously, the symptoms described above, clearly indicate that this is not a healthy economic and financial environment and most probably AKP is trying to find alternative solutions to boost the economy, by intervening in "out-of-country getaways", aiming at external financing that will boost again the economy. The strengthening of the Turkish-Russian relationship, the recent signature of the of Turkish Stream, the invasion to Syria in order to stop the unified Kurdistan and keep a "clean trade corridor" with Iran, the "Unified Cyprus regime" that will enable Turkey to open the energy corridor in the Eastern

https://www.bloomberg.com/news/articles/2016-11-03/erdogan-leans-on-turkey-s-banks-and-slowly-rates-come-down

Mediterranean and the ultimatum to the EU with regards to entering the EU are strong indicators that this is pathway to get external investments and external financing.

And with regards to the banks, a slashing credit-driven consumption and alleviating concerns over the independence of the central bank and regulatory authorities should, or is, part of the reforms that AKP will attempt in 2016 or early 2017, at least when the situation in the country stabilizes following the coup attempt. We should not forget that before the coup, a switch to a presidential system has risen upcoming economic turmoil and public scepticism, even among AKP supporters.

Setting aside the coup for now, the economy is the top of the public's agenda in 2016, perhaps for the first time since the economic crisis of 2008. Whether this time headlines mention 'crisis' or 'reform' will depend on the choices the country's leadership makes. Judging by the initial debate on the constitution, politics seems more likely to dictate the economy in 2016 than the other way around. And the strengthening of Erdogan's position as a political leader, will aim at reforming the Turkish economy by introducing foreign actors and allies in this geopolitical play.

It is obvious that the EU Projects of Common Interest plans do not coincide with Turkey's aims for geostrategic depth in the region; tension between Greece, Cyprus and Turkey will likely rise gradually when these projects enter implementation and construction phases.

We should also note that the EEZ regime in the eastern Mediterranean is still unresolved. The position of Turkey, in all occasions, present unreasonable arguments with regards to the EEZ delimitation and its geostrategic aims [14], especially in the case of Cyprus, where the Turkish position with regards to disputed areas is clearly not based on reasonable arguments, as shown in Figure 5



Figure 5: Turkish claims in Offshore Areas included in the Cypriot EEZ.

Source: TPAO

Pipeline and cable owners should have the following consideration in mind:

At each end of the submarine pipeline lies a terminal situated on the coast, and therefore under the complete jurisdiction of the Coastal State. Based on these segments (since the longest part of the pipeline/cable lies in the EEZ areas), the complete length of the pipeline (or cable) could be considered as a single unit determined by a single legal system, based on unilateral legal framework agreed between connected States, upholding the provisions of UNCLOS and the Energy Treaty.

Another possibility is to register the submarine pipeline in the ship registry of the Flag State, by identifying, through the provision of the UNCLOS and the national legislation, the genuine link between the pipeline (or perhaps a high voltage power cable?) and one of the Coastal States as the Flag State. The International Energy Treaty or a set of Agreements between the involved States and companies can also determine the legal nature of the pipeline/cable. If this is not done, and a dispute arises where it would be necessary to

determine that status, national courts would have the final saying (implementing the provision of the UNCLOS, The Energy Charter Treaty, and other relevant international and national legislation).

The clear property status of the pipeline is necessary as to have normal property rights over the pipeline, court jurisdiction and safety standards and norms. <u>Additionally, the clear property status of the pipeline is necessary as to be able to establish security interests like liens and mortgages.</u>

Another issue that may rise during installation is prevention: The Coastal State has, in the EEZ and the Continental Shelf, a right of prevention of the laying of the submarine pipelines and cables, should they prevent the Coastal States from exercising the rights of exploration and exploitation of the natural resources in those areas. Should the Flag State (survey of laying ship) wish to challenge such regulations, this is to be done through the provisions set in the Art 297 of UNCLOS. What exactly such a challenge would comprise of is not defined by the UNCLOS, and is left to the dispute settlement system to determine in a case of a dispute.

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