# SOUTHEAST MED ENERGY EDEFENSE THE ANALYSIS INSTRUMENT FOR THE STAKEHOLDERS



# SAFEGUARDING ENERGY NETWORKS Securing Greece's "National Power Sources"

The reason why energy networks, installations and pipelines, whether for crude oil or natural gas, are targeted is historically documented by the type of targets chosen by NATO back in 1999, during its 78 day campaign of air strikes against Serbia. The aim of the air strikes - which was accomplished - was to curb the Serbs' will, and so they **aimed to destroy every power source of both the military and political sector in the country.** In this way all military installations, 14 airports, 2 refineries, 1/3 of all power plants, almost all of the country's factories, 595 km of railways, 470 km of roads and 44 large bridges were targeted. All the above are usually chosen targets and in this case, it was practically demonstrated how **energy facilities can also get their "five minutes in the spotlight"**.

**The natural gas transportation and distribution system in Greece** Since ancient times Greece has been an important geopolitical crossroads in the confrontations between East and West. Over the centuries, this strategic position has been a blessing or a curse, depending on how Greece managed the challenges it was faced with. What has been happening lately in the South Eastern Mediterranean energy war is reminiscent of a political and economic thriller. Greece is in the midst of a tough AUTHORS: Dimitris Kyriakos Lt. General (ret.) ex-Director of the Greek Armoured Corps Directorate

TITRE S

Tassos Tsiplakos Strategy Consultant

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geopolitical game with very high stakes and unpredictable outcomes. The USA and the EU are in a behind the scenes conflict with Russia over the control the energy "routes" at the crossroads called Greece. The situation is complicated by the fact that neighbouring Turkey is a revisionist country that uses extreme measures to achieve its strategic goals, as well as to contain Greece's rising importance as energy hub in the region.

In a time of fluidity, Greece which is evolving in an important energy hub and therefore a "bone of contention" in the geopolitical and geo-economic play over energy, needs to formulate strategies, not only for risk management but, also, for managing the significant advantages that can be had for its economy, and also for the strengthening of its energy and broader defence capabilities.

**The Trans Adriatic Pipeline (T.A.P.)** In May 2016, work on the construction of the Trans Adriatic Pipeline (TAP) within the Greek territory begun and is already underway at an intense pace. The pipeline starts at Kipoi, on the Greek - Turkish border, where it shall be interconnected with the Trans Anatolian Pipeline (TANAP).

The TAP runs for a total of 878 km (Greece: 550 km, Albania: 215 km, Adriatic Sea: 105 km, Italy: 8 km). Its land-based portion runs across the whole of Northern Greece (this is the largest part of the pipeline), from east to west and extends to the Greek - Albanian border, southwest of Ieropigi. The section of the pipeline, inside Albania, starts from the Municipality of Bilisht in the Korça region and terminates on the Adriatic coast, at the beaching point, located 17 km northwest of the city of Fier. The undersea section of the pipeline crosses the Adriatic Sea to southern Italy and hits land in the Municipality of Melendugno in the Lecce province, near the area of San Foca. A short distance from there it will be connected to the Italian Gas Transport Network. TAP's shareholding base is made up of the multinational BP (20%), SOCAR the Azerbaijan state gas company (20%), Italian Snam S.p.A. (20%), Belgian Fluxys (19%), Spanish Enagás (16%) and Swiss Axpo (5%). TAP has already signed several Memoranda of Understanding and Cooperation with the constructors of the proposed Ionian Adriatic Pipeline (I.A.P.). Plinacro, the company which manages the Croatian Gas System, BH-Gas Bosnia-Herzegovina's natural gas company, the Slovenian company Geoplin Plinovodi, and the Albanian and Montenegrin energy ministries, are all working with TAP with the aim to link the two pipelines. IAP will channel gas from the Caspian to the markets of Albania, Montenegro, Southern Croatia and Bosnia and Herzegovina, which



are not as yet supplied with natural gas. It is evident that all this gas for all these future users **will be channelled through Greece**.

On the eastern end, **TAP will be connected to the TANAP**, which crosses the entire Turkish territory from east to west. The TANAP, in turn, will be connected to the **SCP (South Caucasus Pipeline)**, which via Georgia and Azerbaijan terminates at the giant natural gas deposit of Shah Deniz II, in the Caspian Sea, from which it is supplied. This triple continuity of pipelines from east to west, SCP, TANAP and TAP, make up the backbone of what Europeans call the **Southern Gas Corridor**. This corridor constitutes one more natural gas entry point – from the South and Azerbaijan this time – to the everthirsty for natural gas Europe.

### **Future Structures – Extensions – Interconnections**



Two at least, new projects concerning natural gas are at an advanced stage of design, and only a short distance from the start of construction work. In fact, both are related and they will operate in conjunction with the natural gas infrastructure that already exists or is under construction.

1. The Alexandroupolis floating unit INGS project

The Alexandroupolis floating unit (FSRU:

Floating Storage Regasification Unit) is a private project by **Gastrade SA (80% Copelouzos Group and 20% GasLog of the Peter Livanos Group).** The first project is the **Alexandroupolis Independent Natural Gas System (I.N.G.S.)** which will consist of an offshore floating unit for receiving, storing and regasifying Liquefied Natural Gas, as well as an underwater and onshore pipeline system via which natural gas shall be forwarded to the Greek National Natural Gas System (NNGS) and from there to the final consumers

The Alexandroupolis INGS aims to create **a fourth natural gas entry port for Greece**, with a capacity of up to 6.1 billion c.m. of natural gas per year and a storage capacity reaching 170,000 c.m. of liquefied natural gas. For the immediate future, there are plans for it to be connected with, and to supply natural gas to other gas transport systems, such as the TAP and mainly the IGB, the Greek-Bulgarian interconnecting natural gas pipeline.

**2.** The I.G.B. pipeline (Interconnector Greece – Bulgaria)

The IGB Greek-Bulgarian interconnecting natural gas pipeline is expected to link the Greek NNGS to the corresponding Bulgarian one and to the TAP, starting in the Komotini region and terminating at Stara Zagora in Bulgaria. The IGB shall have a length of 182 km, a diameter of 32 inches (813 mm) and an initial transport capacity of 3 billion c.m./year, with the facility to upgrade to 5 billion c.m./year, through the addition of a compressing station. Its construction is expected to



begin in the first quarter of 2018 and its commercial operation to start in 2020.

Its co-financing has already been approved by the European Union within the framework of the **European Economic Recovery Plan (EERP)**, while at the same time complementary forms of financing through the Structural Funds are being examined. The IGB's ultimate goal is not only to act as an alternative gas supply for Bulgaria, against its current gas supply of solely Russian origin, but also its operation as **part of the "Vertical Corridor"**, with the aim of **transporting natural gas from the Greek gas system to the markets of Central and Southeastern Europe**.

### Infrastructure Principal Natural Gas Installations of Greece

The significance of the gas infrastructures that exist, are being upgraded or are under construction in Greece has reached a considerable degree. Let's take a closer look at the existing infrastructure, that under construction and that which is planned for immediate implementation.

The NNGS consists of:

The main gas pipeline from
Sidirokastro to Attica, with a length of 512 km and a diameter of 36 (0.91 m) and 30 inches (0.76 m) and its branches, with a total length of 954 km
The border measuring stations of
Sidirokastro and Kipoi at Evros
The Revythousa LNG station

- The compressing station at Nea

- Mesimvria in Salonika
- The intermediate measuring and regulating stations

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The **TAP** within the Greek territory shall consist of:

- The Kipoi Evros Ieropigi Kastoria section of the pipeline, with a length of about 550 km and a diameter of 48 inches (1,2 m).
- A compressing station at Kipoi Evros to ensure a transport capacity of 10 billion c.m. of gas per year and a future compressing station near Serres, to be activated in the event of a future decision to implement the doubling of pipeline's transport capacity to 20 billion c.m./year.

- 22 valve stations along the route of the pipeline's Greek section.

- The measuring/regulating station in Nea Mesimvria and its interconnection to the NNGS, with a bi-directional flow capability. The **IGB** within the Greek territory shall consist of:

- The Komotini - Greek-Bulgarian border pipeline section, with a length of about 31 km and a diameter of 32 inches (0,81 m).

- The measuring/regulating station at Komotini.

The **Alexandroupolis INGS** shall consist of:

- The permanently anchored floating unit

- The undersea pipeline, with a length of 24 km, to Apalos village, east of Alexandroupolis.

- The 4 km long land-based
- transportation pipeline.

- The measuring/regulating station at Amfitriti village northeast of Alexandroupolis and its

interconnection to the NNGS.

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## The definition of the "security" concept

The Greek N.N.G.S. infrastructures are part of the **European infrastructure** of vital importance. In Greek and international military terminologies are defined as "sources of national power". A possible disruption of their operation or their partial or total destruction would have a significant impact both on the country and Europe-wide.

The term "security" therefore encompasses both their **physical** security and their security from external - international threats. The term "Physical security" includes any inhibition of infrastructure operation that may be related to theft, sabotage, terrorism, accidents and natural phenomena. These contingencies are managed by drawing up plant vulnerability studies, infrastructure security management plans and the installation of security systems. As an example such systems may be: closed circuit television (CCTV), all kinds of tamper detection sensors, alarms, floodlights, surveillance drones, etc. These systems are managed by security personnel and automated systems that are controlled and coordinated by the facility's Physical Security Control Centres.

## The contribution of local communities

An extremely important factor influencing physical security is the overall attitude of the residents and the local communities of areas along pipeline routes, as well as around major energy facilities. The **TAP example** in this particular aspect of managing the issue is typical. On this issue the TAP consortium has been acting in two main directions: Firstly, they sought to secure the consent of the owners and minimize any reactions to the nuisance of the pipeline's passage, both during the construction phase and later on by paying **"generous" financial compensations** and by organizing – financing **actions to widely disseminate information**.

A second direction in which TAP has been active is in implementing projects that constitute offset benefits for the wider areas it transits. Such projects were mainly proposed by Municipalities and Regions and usually concerned the improvement of transport infrastructure, upgrading - construction of school facilities, cultural and environmental actions, development projects and projects for the optimization of local energy projects etc. In Albania particularly, there have been projects and actions for which Prime Minister Rama himself was present at the inaugurations, in this way both highlighting and promoting the benefits resulting from the TAP's passage through local communities.

It is easily understandable that the population's positive attitude significantly affects the issues of physical security. The local population can provide information and work with the pipeline security staff and local authorities, and finally - may potentially - prevent any action affecting the pipeline, since its presence will have been beneficial and will continue to be so in the future.

At the same time, the Consortium that owns the TAP, provided for and organized the installation, operation and staffing of a security system prior to beginning of the construction work. Indicative of the importance placed on security was the assignment of a former Hellenic Army General Staff Chief as the head of the security system.

## Security Planning and Pipeline Routing

Security from external - international threats is one of the very basic parameters of energy infrastructure design and implementation. Indicatively, for the TAP, the first attempts to plan its route began in 2003, and indeed in the initial stages a possible route was seriously considered which did not include Greece's territory. Specifically, the route through Turkey - Bulgaria - Skopje - Albania was considered. Finally, the route chosen was via Turkey - Greece - Albania, which was not absolutely desirable from the Greek point of view, since Greece would have preferred the pipeline to exit towards the Ionian - Adriatic Sea from Greek territory.

It is believed that **security concerns** were the main reason for not opting for the route via Bulgaria - Skopje, although this has never been officially confirmed. Economic and geostrategic factors, as well as the plans for the further expansion of the main pipeline's network along the Adriatic coast, eventually led to opting for the route via Albania, despite reservations concerning security issues and the lack of the necessary road infrastructure (which was constructed and burdened the final cost of the TAP) during the pipeline's construction phase.

### Routing through Thrace poses possible threats...

The pipeline's route through the territory of Greek Thrace largely follows the basic geographic route, along the main and largest axis of military action for forces operating from the east to west and vice versa. This axis is aligned along the following locations: Ipsala - bridge at Kipoi - Alexandroupoli - Atarni pass -Sapes - Komotini - Xanthi. It becomes therefore apparent that "geography" continues to play a catalytic and timeless part. This route is not only identical with the route of the ancient Roman Via Egnatia, but also with the modern Greek Egnatia Odos, and also with the TAP's route and the existing Greece-Turkey natural gas interconnecting pipeline that starts from Kipoi at Evros and terminates at the PPC power plant in Komotini. Finally it is identical with the main axis of military action from Eastern Thrace towards Western Thrace. Therefore, with the country's land forces currently deployed defensively in order to prohibit any large-scale military action along this axis, they are in fact on the defensive along the road and energy routes with all the unavoidable consequences. This means, practically, that no serious

#### military action can be carried out without affecting the smooth operation of the natural gas routes.

This works in two ways. On the one hand it makes it clear to the international community and especially to the European Union that Europe's energy sufficiency and security would be seriously threatened in the event of any aggressive Turkish actions in the area. On the other hand, it is also obvious that the "neighbours" have something else in mind. The planning of the TANAP pipeline terminating at the Greek-Turkish border, in the area of the bridge at Kipoi was carried out with Turkey's consent, which was actively involved in the decision-making process. The TANAP's terminal point, which "transports" gas from Azerbaijan to the Greek border, is where the TAP starts.

It is worth pointing out at this point that the Turkish "BALYOZ" (sledgehammer) attack plan, revealed in 2010, was directed not towards the south part of Evros river, as would have been the obvious choice, but against the central and northern parts of the river. The main area of attack is north of the town of Soufli and up to the town Didimoticho. This is the area delimited by two Evros tributaries, Potistiko Rema and Erythropotamos. In that area, the distance between the Greek-Turkish and the Greek-Bulgarian borders is just about 20 km.

Therefore, in the event of a successful attack, geographically it would be easy **to cut off and isolate the northern part of the Evros' prefecture**. The area of the **principal effort** is about 30 km away, as the crow flies to the north, from the pipeline routes. Could this be a coincidence? Obviously this has been planned and decided upon by the Turkish side. Their expansionist plans can be "put into effect" without affecting the energy routes or in the event of their being affected, this can



**be blamed on the Greek side.** This peculiar coincidence **should concern the Greek military leadership.** A shift northwards of the centre of gravity for any potential or future military operations is obvious. However, it is surprising that in the area of the Greek-Turkish border, near the village of Kipoi, the TAP's route is almost identical to that of the 2007 interconnecting natural gas pipeline linking the Greek and Turkish natural gas networks. The distance between the two routes is **just around 600 meters**.

#### The Greek Action Plan

On the Greek side, **very significant military forces** are based or can be defensively deployed in the area of the main axis of military action from Eastern Thrace towards Western Thrace. Specifically, facing the Greek-Turkish border are the 31<sup>st</sup> and the 7<sup>th</sup> Mechanised Brigades. The two brigades are subordinate to the XXII Mechanised Division with its headquarters in Alexandroupoli and are backed by the



XXIII Armoured Brigade, which is also oriented along this axis.

Finally, the 4<sup>th</sup> Army Corps and the 1<sup>st</sup> Army's reserve forces are deployed along this axis to a much greater depth. The main units are: The XX Armoured Division and the II Mechanised Infantry Division. It is therefore easy to see that in the case of operations, most of the country's land forces would be on the defensive along the specific routes. All these forces, as well as their respective areas of operational deployment and infrastructures in the above zone of action, are fully covered by a particularly dense grid of air-defence. As regards anti-aircraft systems, the broader area is covered by long-range PATRIOT, medium range HAWK, short-range TOR-M1 and very short-range ASRAD air defence systems.

#### **TAP routing in Macedonia**

Here too, geography plays a major part. The Rupel passage has always been the historical main point of entry and the main axis of invasion from the Bulgaria -Eastern Rumelia area towards Macedonia and the city of Thessaloniki. It is exactly this route that is followed by the pipeline that brings Russian gas to Greece from the north. Beyond the city of Serres, the natural gas pipelines from Russia and Azerbaijan cross the Lahanas Pass and reach the Thessaloniki area.

In the area northwest of Thessaloniki, near the village of Nea Mesimvria the two pipelines, which follow almost parallel routes, from the area south of Serres towards the southwest, finally intersect and interconnect. At the measuring/ regulating station in Nea Mesimvria, the TAP connects to the Greek NNGS and at that point it will supply the Greek





system with 1 billion c.m. of natural gas, which is **the agreed quantity that the TAP transfers for Greece.** It should be noted that in this area the interconnection will be capable of bidirectional flow, **which is expected to be of particular value in the future.** 

#### The Defence Grid in Central Macedonia

Central Macedonia is the wider area in which the **Hellenic Army's strategic reserves** are based. Specifically the II Mechanised Division is based in the city of Edessa, to which are subordinated the 33<sup>rd</sup> Mechanised Brigade at the town of Polykastro and the 34<sup>th</sup> Mechanised Brigade at the town of Assiros. The town of Nea Santa, near Kilkis, is home to the 71<sup>st</sup> Airborne Brigade, while the Raider's Brigade is based in the town of Redina. Finally, the town of Litohoro is home for the XXIV Armoured Brigade.

It should be noted that the wider area of Thessaloniki constitutes a broad transport and energy hub, encompassing a very large industrial area with particularly critical industrial facilities (refineries, etc.). Additionally, in the area is situated the strategically very important port of Thessaloniki and the "Macedonia" international airport. Therefore, a broad security network for these infrastructures has been designed and has been operational for decades. This wider area is under the Air Defence umbrella of long-range PATRIOT and medium range HAWK air defence systems. The 181st HAWK Guided Missile Battalion with its anti-aircraft batteries is being deployed in the wider Thessaloniki area and to the east. Within the unit's mission framework, at the end of June 2017, an operational evaluation of the battalion was carried out by the commander of the 1<sup>st</sup> Army. The message was clear: right in the middle of the Greek summer relaxation, the battalion is training and evaluated in order to maintain a high operational readiness.

#### Safeguarding Greece's energy "heart"

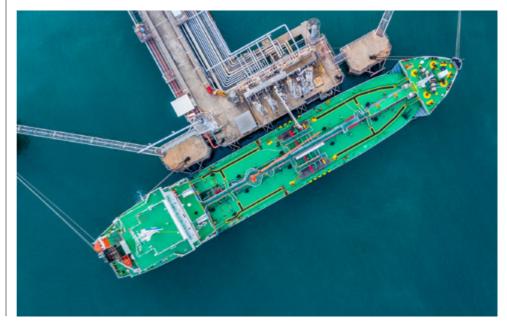
The Pelagonia - Kozani plateau, i.e. the Kozani - Ptolemaida - Amyntaio - Florina area, has for several decades been the country's lignite energy producing centre. The area is now crossed by the TAP. Therefore, a multitude of critical energy facilities that are characterized as "power sources" for Greece are located in the region. Their security is the responsibility of the 9<sup>th</sup> Mechanised Brigade, which despite opposition voiced over the last years to the existence of "unnecessary" military forces in Western Macedonia, is still there to safeguard the country's energy centre.

Recently, on **October 4 2017**, **as part of the "Parmenion 2017" annual national manoeuvres, an exercise for countering specifically asymmetric threats was conducted in the area, in the presence of the Hellenic Army General Staff's (H.A.G.S.) Chief.** It is important to stress that, while the main interest during the nationwide manoeuvres was focused on the main activities in Thrace and Rhodes, **the H.A.G.S. placed great importance on this particular** 

#### **exercise which was in fact carried out inside the PPC's (ΔEH) mining facilities.** In the exercise were, also, participated a large number of **National Guardsmen**, since it is the H.A.G.S.' standing position that these men, being local residents and having an excellent knowledge of the area, are an integral part of the military's human resources implementing national defence planning, particularly in Western Macedonia.

#### Security of the Central – Southern Greece and the Attica Basin

The natural gas network's main pipeline crosses the eastern part of the country. The main geographical transit points from north to south are: Thessaloniki - Katerini - Platamonas - Larissa - Lamia - Livadia - Thiva - Athens. The most important installation along this route is in Attica, on Revythousa Island, where the LNG station of the same name is located. The station is undergoing major upgrading work - for the second time within 15 years. The installation, as of 2018, shall be a very significant port for receiving natural gas but, also, for exports towards eastern European countries providing the county's energy sector with strategic capabilities.





Consequently, this particular installation from a security aspect, benefits of all the land, naval, air and air-defence forces covering the eastern part of the country, and the Attica basin in particular, under the command of the **Supreme Military Command of the Interior and Islands**. Obviously, this was a factor that weighed considerably when it was decided that **the second major gas entry port** would be created in Attica and not in some other decentralized location.

#### Medium-Term Security Challenges...

For Greece, the **two LNG ports** are Revythousa and the future Alexandroupolis INGS which is in the final stages of design. For their significance to be fully understood, suffice it to say that in 2017 consumption in Greece is expected to **exceed** 4.1 billion c.m. of natural gas. Today Revythousa accepts ships ferrying up to 140,000 c.m. of LNG, while in 2018 it will accept larger capacity ships of up to 180,000 cubic meters of LNG. Today it regasifies natural gas at a rate of 1,000 c.m./hour and stores 130,000 c.m., while in 2018 it will regasify up to 1,400 c.m./hour and will store 225,000 c.m. **Storage capacity is what is making performance really soar.** It is planned for the upgraded Revythousa to import around 7 billion c.m. of natural gas to Greece per year, of which 2 billion c.m. are to go to the fast growing Greek market and **5 billion c.m. to exports.** 

Note that, as already mentioned, the Sidirokastro Measuring Station and generally the northern part of the Greek energy system, has already been upgraded and now also allows reverse flow. The interconnection of the NNGS with the TAP allows Revythousa to supply this gas pipeline too. It is worth mentioning that the TAP, with an annual capacity of 10 billion c.m., transports gas to Italy and via the Italian pipeline system to Central Europe. Future upgrading, with an increase in pipeline pressure, will increase its capacity to 20 billion c.m. annually. Furthermore, it is planned for the TAP to branch out to the western Balkans via the IAP (Ionian - Adriatic Pipeline). The latter will supply Montenegro, Bosnia and Croatia. It is evident that the TAP shall create the need for the construction and operation of an Albanian Gas Network to meet the neighbouring

country's needs.

The Alexandroupolis INGS "is one more Revythousa". It shall regasify 400 c.m./hour, it shall store 170,000 c.m. of gas and shall be linked to both the TAP and the Greek NNGS. INGS' basic aim is via the IGB to supply the Bulgarian natural gas system and from there the respective Romanian and Serbian systems. Looking at the prospects, the INGS is in fact competitive to the natural gas supplied by the TANAP to the TAP, and practically Greece will, gradually, completely substitute the Azerbaijani gas via Turkey.

As a matter of fact, this new plant constitutes an energy detour for Turkey with all the consequences. This upgrades Greece's energy role, but simultaneously "hurts" Turkey's interests and, of course, makes the INGS' security issue much more complex. It is more than evident that a different operational plan, against external threats or harassment, is required to protect a floating unit roughly 20 km from the coast, very close to the maritime border with Turkey, in the ethnic "sensitive" area of Thrace.

### The international experience...

Turkey, which has been involved in a long-standing conflict with the Kurdish revolutionary element - mainly the PKK - has experienced and faced multiple attacks on energy pipelines. These attacks have intensified over recent years with the outbreak of the civil war in Syria. The main victim of these attacks has always been the Kirkuk-Ceyhan crude oil pipeline. Ceyhan is the Turkish Mediterranean port for the loading and export of Iraqi oil. The pipeline is a popular target for "terrorist" attacks by the Kurds. After each attack, the disruption of the flow is usually short (5 to 10 days), as every possible technical effort is made for its restoration, by the Turkish state-owned energy company BOTAS, which manages the pipeline on Turkish territory. The pipeline's capacity is 150,000 barrels of crude oil/day and one can easily understand the economic consequences of these attacks.

In the recent years, there has appeared another worrying phenomenon. Natural gas pipelines from Iran to Turkey and from Azerbaijan to Turkey, have also sustained "terrorist" attacks on Turkish soil and have suffered shut downs. Here too, the consequences are similar and we now have a practical international example of gas pipeline targeting.



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### The "Balkan Energy Pact"

Greece has ambitions for, and has already put in motion, **the upgrading of its energy role**, not just as a transit country, but also as a host country for the storage and forwarding of natural gas towards other countries, both in the Balkans and in Eastern Europe, as well as a producer in the future. This planning, apart from being its national priority, is also a primarily **American strategic energy goal** in the region, for two main reasons:



**F** irstly, the U.S. desire, pursue and "are pressuring" European countries to become as independent as possible from Russian natural gas so as to reduce - to the point of zero - the **energy dependence on Russia**. US ambassador to Greece, Geoffry Pyatt, recently described in his speech the American positions on Greece's and the region's energy issues in a very clear way, at the 6<sup>th</sup> Energy Conference entitled: "ENERGY - INVESTMENTS IN TECHNOLOGY: Seeking a New Development Model" by HAEE (Hellenic Association of Energy Economics),.

Pyatt stressed that private projects such as the TAP pipeline are very important for the Greek economy. Regarding natural gas, he pointed out that **Greece plays a major part in Europe's energy security**, as energy projects such as TAP, IGB and Revythoussa's third reservoir bring new potential into the energy market. In addition, **he commented positively** on the design of new energy projects such as East Med, the Alexandroupolis LNG terminal and the "Vertical Corridor", which enhance the EU's energy security. In fact, he pointed out that *"these projects will not replace Gazprom's gas overnight, but they will prevent it from using this gas as a weapon".* 

**Secondly**, the U.S. believe that the capability to receive large volumes of LNG by sea at Alexandroupolis' terminal, not only reduces energy dependence from Russia, but also constitutes a first class opportunity for the export of U.S. shale gas to Europe.

Recently, in December 2017, there was a **four-party meeting at a Prime Minister level between Greece - Romania - Bulgaria - Serbia.** The main issue was the promotion – under the auspices of the U.S. - of the interconnections for the gradual independence of these countries from Russian gas. During the meeting, special mention was made by the Greek Prime Minister Alexis Tsipras for the



Alexandroupolis INGS, which will allow the full diversification of the sources of natural gas supply.

The geography and the diplomacy of energy supplies, upgrade Greece's role in relation to the wider geopolitical developments in the region. This, however, creates **even higher demands** for the planning and implementation of even more security measures, in order to better safeguard national power sources, at both the energy and the economic as well as the geostrategic level.

> www.semedenergydefense.com email: info@semedenergydefense.com

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