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THE WEAKEST LINK? HEDGING ENERGY SECURITY CHALLENGES AND OPPORTUNITIES WITHIN THE EASTERN NEIGHBORHOOD, THE MEDITERRANEAN AND THE BLACK SEA/CASPIAN REGION

The shift from oil to gas has inevitably led to the emergence of regional energy politics with a growing number of stakeholders involved in influencing and shaping the energy security discussion. What used to be predominantly the sovereign decision of a state has now become a subject of discussion which, owing to geological, political and often security constraints, may have an effect on the success of a policy. The regional aspect of energy politics is particularly potent with regard to natural gas. This is especially the case with regard to the broader geographical space comprising of the Eastern Neighborhood, the Mediterranean and the Black Sea/Caspian region. With the world's largest proven gas reserves to be found in this tripartite 'Shared Neighborhood', inevitably the dynamics of natural gas politics have conflated, demanding new solutions.

Key words: regional energy security, energy policy, transit, security of supply and demand, Eastern Neighborhood, Mediterranean, Black Sea/Caspian region.

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The changing dynamics of energy security

In the last two decades, energy politics has grown in importance as a state, regional and global issue. With a triangle of broad and overlapping economic, security and sustainability preoccupations, energy policies have been traditionally outward-oriented from energy consuming to energy producing regions. From its inception, hydrocarbon energy politics has been rooted in the security of crude oil supply dating back to the oil crises that broke out in the 1970s. With a distinct supply security rationale at the core, 'energy security' has thereafter been mainly associated with the adequacy of the energy supply at a reasonable price. (Haghighi, 2008, p.461) The logic of energy supply security informed the energy policies of energy-consuming states and shaped a distinct language of 'energy security' centered on the interests of energy consumers. Nevertheless, over the last two decades this language has changed substantially due to an unparalleled shift in the balance of power between energy consumers and producers. As the adequacy and the reasonable price have been increasingly beyond reach with an increasingly 'tight' global market and volatile oil prices, the language of energy security discussions has been 'upgraded' from the 'traditional', and global in scope, oil security to include a new hydrocarbon source – natural gas. Just as the shift from coal to oil in the middle of the last century brought about a revolutionary change in the economic and political system, the shift from oil to the more environmentally sustainable gas has been taking place as a 'fuel of choice' to bridge to a future green energy. While for decades, oil security shaped, and arguably continues shaping, the way energy security is considered, with the shift to natural gas there are increasingly new dynamics at play that require a regional focus.

The regional aspect of energy politics is particularly potent with regard to natural gas and this can be described with reference to a broader geographical space comprising of the Eastern Neighborhood, the Mediterranean and the Black Sea/Caspian region. With the world's largest proven gas reserves to be found in this tripartite 'Shared Neighborhood', inevitably the dynamics of natural gas politics have conflated, demanding new solutions.

Instead of focusing on one geopolitical energy security region, this paper seeks to outline some of the key features that have the potential to underpin a broader conceptualization and operationalization of the three overlapping regions within one, wider notion of the Shared Neighborhood. Being wary of the ongoing challenges of a security and nonsecurity nature, the paper will highlight some of the main challenges but also the possible synergies within the Shared Neighborhood to understand what actions precondition the operationalization to conceptualize the Shared Neighborhood not as the weakest link but as the strongest in energy terms.

A Shared Neighborhood of competing energy conceptualizations?

Distance is the key underlying principle behind the discussion of each of the three energy security 'regions'. Energy security 'happens to be located' around the major energy-producing centers and alongside major pipeline outlets linking the producers of energy via transit regions with energy markets.

Due to the nature of the gas trade, the essential facilities that are required for transmission and distribution, as in the case of natural gas pipelines, constitute a natural monopoly without which the industry cannot operate. The natural monopoly of pipelines is the backbone of the networked industry of natural gas. The transmission and distribution networks, especially long distance pipelines and interconnectors which often link two different networks into one grid, have been, and continue being, subject to regulation to ensure energy security.

Indeed, in economic terms the relatively short extent of space between energy producing and consuming regions has shaped each of the three geographical regions. Due to the proximity of the regional energy actors, threat perceptions travel alongside the transportation infrastructure that links the three distinct actors together. (Raszewski, 2012a, pp.105-106)

As the shift in the balance of power between energy consumers and producers continues, what constitutes energy security is increasingly negotiated by the actors involved and, in particular, energy transit states have an growing input into this process of negotiation.

The Eastern Neighborhood

The strong correlation of interests in the gas trade between the European Union (EU) and Russia has resulted in the prominence of the Eastern Neighborhood. As the key energy transit region comprising of Belarus, Moldova and Ukraine to the west, and Armenia, Azerbaijan and Georgia to the east, the Eastern Neighborhood has grown in importance in the 2000s. The two EU enlargements to Central and Eastern Europe (CEE) intensified energy security discussions emphasizing the real or perceived problem of energy dependence on Russia. Truly, the 2000s have been the hallmark of energy security in the regional dynamics of the Eastern Neighborhood mainly due to the lack of a commonly shared perception of energy insecurity at the level of the EU. The strong correlation of interests between 'old' Europe and Russia has been thereafter challenged by the shrinking distance that has brought the EU bloc closer to the Eastern Neighborhood. With the 'new' EU member states becoming a visible and active part of the external energy policy of the EU, the issue of energy security has witnessed an increased politicization of the alleged dependency problem for the entire EU. (Raszewski, 2012a, p. 9)

Supply insecurity perceptions have been concentrated on the key energy transit country of the region, Ukraine. Ukraine plays a key role in the EU–Russia gas supply equation as the major conduit for Russian gas en route to Europe. (Yafimava, 2011) The uninterrupted transit of gas via Ukraine to the border of the enlarged EU is critical, but it is also vulnerable due to the country's lion share of the transit capacity. Approximately 78 per cent of Russian exports of natural gas transit Ukraine and any major interruption of the gas supply may affect Russia's security of demand from energy markets in Europe. (Raszewski, 2012a, p.36)

While a lack of agreement regarding the future role of Ukraine's gas transmission network has been focused mainly on pricing which has sparked repeated disputes between Moscow and Kyiv, a key factor for the Eastern Neighborhood's relevance the importance of transit and the need for building a new gas infrastructure as well as upgrading the existing network – has been the principal point of reference mainly in expert circles. (Stern, 2006, pp.18, 26) With its central role in the EU–Russia gas trade, Ukraine is well suited to play the role of transit country. Based on data from Gas Infrastructure Europe (GIE) and Naftogaz, Ukraine's average gas storage capacity is 36.1 bcm (billion cubic meters) and happens to be located mainly in the western part of the country. The significance of the capacity is clear when compared with the total storage capacity of thirty European countries (excluding Ukraine) which totals 75.4 bcm. (Pirani, Stern and Yafimava, 2012, p. 31)

Although Ukraine has a comparative advantage in gas transit, it has struggled to uphold its status in the gas trade between the EU and Russia due to a series of problems with its internal and external energy policies, particularly towards Russia and the EU. Inconsistencies in its energy policies coupled with a Soviet-era outdated infrastructure and an undiversified energy supply portfolio have resulted in Kyiv's inability to achieve gas pricing stability or gas transportation system modernization. (Kapitonenko, 2012, p.3) Equally, the Eastern Neighborhood's key transit country's harmonization of its energy law with that of the Energy Community following Ukraine's accession in 2011 is yet to come to fruition.

Due to the strong correlation of interests in the gas trade between the EU and Russia, the Eastern Neighborhood has so far had little chance to capitalize on the shrinking distance between the consumers and the producers of energy. Instead, growing insecurity perceptions have dominated. Poland has been one of the few actors in Central and Eastern Europe (CEE) that has sought to influence energy security discussions within the Eastern Neighborhood. Estimated at 5.3 trillion cubic meters of potentially recoverable shale gas by the US Department of Energy (EIA, 2011), the promise of unconventional gas has been taken seriously in Poland while resonating within the CEE. The support Warsaw has given to the emerging resource in the region has raised hopes of changing the balance between energy consumers and producers although the potential of shale gas will be determined in the coming years. (Raszewski, 2012b, p.141) However, in the meantime, the shale gas discussion has been changing qualitatively. A lower than expected re-evaluation of the extent of proven shale gas reserves under the ground that are yet to be explored, has been increasingly challenged by growing concerns over the environmental impact the exploration of unconventional gas reserves may have. Some members of the European Parliament seem to be very positive about the new frontiers of shale gas calling for a 'bold and brave' approach to the resource that is needed as 'the EU's competitiveness is at stake'. (Tzavela, 2012) As the Eastern Neighborhood's utility in delivering energy security is negotiated, 'bad intentions' oriented towards assuming 'dogmatic assumptions' rather than 'scientific evidence' have been suggested as possibly hindering what should be the secure exploration and production of the resource in Europe. (Sonik, 2012)

While the full picture of unconventional gas is expected to be assessed in the coming years, the key to success, as is the case of Ukraine, is infrastructure. If the future of shale gas exploration is to be bright, a new infrastructure will have to be built to link the sources of unconventional gas with the grid to allow for the commercialization of the gas. To ensure that the Energy Community brings results, once operationalized the shale gas opportunity should be extended to the Eastern Neighborhood. It would allow the Eastern Neighborhood, in particular Ukraine, to create stronger bonds between the EU and the region and, as a result, galvanize stronger energy interdependence between the EU and Russia by stabilizing Ukraine's internal energy supply. Recent developments suggest that Russia is also

keen to tap into its unconventional gas reserves and, due to its energy superpower status, wants to be part of the emerging discussion about energy security in the Eastern Neighborhood. (Russia Today, 2012) Ensuring links between the Eastern Neighborhood and Russia in that respect may help.

The Black Sea/Caspian region

In the absence of a clearly defined regional identity, the Black Sea/Caspian region is characteristically identified with oil, gas and the existing pipeline infrastructure. The new post-Cold War environment and the support of the United States (US) for what were called at the time Newly Independent States, facilitated the emergence of the new region that has since been intrinsically 'defined by oil and gas'. (Aydın, 2004, p.3) The political importance of the wider Black Sea/Caspian region stems from the role it plays both geopolitically and in the political economy of energy. Due to the Caspian's regional constraints, primarily its land-locked geography, the regional identity constructed around oil and gas conflates the region with the Black Sea region in energy terms, with Turkey as the conduit linking the energy-producing regions in the Caucasus and Central Asia with the consuming states in Europe. The wider Black Sea/Caspian area is 'home to major energy producers' including Russia and Azerbaijan as well as 'transit states' in particular, Turkey. (Triantaphyllou, 2007, p. 295)

The Baku-Tbilisi-Ceyhan and the South Caucasus Gas Pipeline would be unthinkable without Russian and US consent which was facilitated in the 1990s. Nevertheless, the deterioration of energy politics between the EU and Russia in the 2000s became the single determining factor in complementing Ukraine's supply corridor with the one traversing the South Caucasus and Turkey.

Yet again, distance and the growing importance of natural gas necessitating accommodation through pipelines rather than liquefied natural gas (LNG) facilities brought the Black Sea/Caspian region to the center of the gas security debate. A near decadelong discussion about projected infrastructure, the Nabucco and South Stream pipelines, brought the Eastern Neighborhood and the Black Sea/Caspian region ever closer. The merging of the Eastern Neighborhood with the Black Sea/Caspian region came about with the involvement of the states of the South Caucasus in regional pipeline politics not least because Russia's vested interest in the region, that secures a lion share of its security of demand, aimed at payback stability.

Even though Turkey's hydrocarbon energy production is minimal, Turkey's strategic objective has been built around energy transit. (Aktürk, 2008) Indeed, Turkey is, and wants to stay, in the Caspian region to guarantee the security of supply westwards to gas markets in Europe based on cooperation rather than the harmonization of transit rules. (Raszewski, 2012a, p.108) The harmonization of energy norms and rules has been the focal point of the EU's policy towards Russia and Turkey. As far as the latter is concerned, the policy facilitated through the institution of the Energy Community has failed to export the EU-achieved rules to Turkey. The fiasco of the EU's policy of the harmonization of its energy law aimed at its immediate neighborhood has resulted in Brussels' temporary 'withdrawal' from discussions on infrastructure. Instead, the EU has been focused on the completion of its internal gas market. (Tindale, 2012) The success of the EU's energy policy internally depends on how successful it is in attracting cooperation with its energy rich neighborhood. In short, at least in the interim period, the success of the energy policy depends on the level of cooperation with energy producers. As much as the decarbonization of EU energy policy will take place over the long run, opening up even more space for future cooperation between the 'South and the North' of the Mediterranean with renewable energy, in particular solar and wind; the long interim phase that is expected to last three decades will be characterized as coexistence between the planned green energy of the future with natural gas as the fuel of choice.

With Russian gas dominating Turkey's security of supply delivered through two existing gas pipelines, Ukraine-Romania-Bulgaria and the Black Sea bedlaid Blue Stream, Turkey has prioritized energy relations with Russia over the EU-orchestrated energy market harmonization. Based on state priorities rather than markets, the emerging statecontrolled gas hub policy that Ankara has been pursuing has attracted the attention of the Russian gas industry. (Ersoy, 2012) This may signal a new value in the regional energy dynamics and, at the same time, may require Turkey to plan its energy policy objectives ahead to ensure optimal outcomes. With a cluster of interrelated issues with energy and security at the top, the region has been intersected by the politics and security preoccupations of regional actors and, often, their diverging agendas. However, the regional role in energy transit is pivotal. In fact, the transit role of the region has come to be perceived as the most important 'commodity' the region has to offer in guaranteeing energy security. (Raszewski, 2012a, p.107)

The Mediterranean

The Mediterranean Neighborhood has been known for its contribution to energy security both in terms of oil and gas supply. Nevertheless, it has been natural gas that Algeria has been mainly known for as it represents two thirds of the country's hydrocarbon base. From this, nearly half of its gas is exported by means of dedicated gas pipelines to European Union markets - the Maghreb-Europe and Medgas pipelines to Spain and the Galsi and Trans-Mediterranean gas pipelines to Italy. (Darbouche, 2011, p.5) Although Algeria remains largely behind the headlines, its main supply markets are in the EU at roughly 52 bcm which makes it the Union's third biggest supplier of gas, after Russia and Norway, accounting for 20 per cent of the total EU gas mix. (Ghilès, 2009)

As much as the Algerian energy security case within the Mediterranean Neighborhood can be viewed as being fairly stable, the eastern flanks of the Mediterranean have been through turbulent times. The so-called Arab Spring has significantly changed energy security relations between Egypt and Israel. A key transit country by virtue of the Suez Canal and the Suez-Mediterranean oil pipelines linking the Persian Gulf oil producers with Mediterranean outlets, Egypt has been a key supplier of gas to Israel through the Arish-Ashkelon branch of the Arab Gas Pipeline (AGP). The AGP exports Egyptian gas to Jordan, Syria and Lebanon circumventing Israel. The Arish-Ashkelon pipeline links the Egyptian gas field of Arish to Ashkelon through a submarine interconnection. Since the start of the uprising in 2011 which toppled President Hosni Mubarak in Egypt, the Arab Gas Pipeline's branch to Israel has been attacked 15 times with deliveries of natural gas said to be halted as of April 2012. (Reuters, 2012)

Political instability in the region following the Arab Spring was preceded by quite unique findings of new gas sources in the region. The Eastern Mediterranean gas findings of Tamar, Leviathan and Block 12 have been identified as potential sources of new gas and account for the world's top five largest discoveries of the decade. (Kahn, 2012) When available for commercial production, the new gas findings have the potential to significantly change the energy security of the region. Nevertheless, challenges remain. In a recent address, the Minister of Commerce, Industry and Tourism of Cyprus emphasized Cyprus's ownership over what is underneath the surface, be it on land or in the South Eastern Mediterranean, emphasizing Cyprus's ability to play a role as a regional gas hub. (Sylikiotis, 2012) The Block 12 field off the shore of Cyprus, with its 200 bcm natural gas capacity, is expected to come on stream between 2018 and 2020. Countries in the Eastern Mediterranean such as Cyprus and Greece eye opportunities stemming from the exploration of the new findings. As the financial crisis continues, the exploration and production of natural gas and, possibly oil, is viewed as a unique opportunity to break the spiral of crisis and not in the least enhancing their geopolitical standing. During his historic, first-ever visit to Cyprus, Israeli Prime Minister Benjamin Netanyahu and the Cypriot President Dimitris Christofias spent their time discussing the possibilities of cooperation in the field of energy. (Ferziger and Orphanides, 2012) Cooperation with Israel, where the other new gas fields have been discovered, is the prima facie reason for seeking to combine the interests of the two states towards turning Cyprus into an energy hub in the Eastern Mediterranean. (Onoufriou, 2012, p. 2)

As much as the exploration and production of 'new' gas may be a positive development, the road that leads there may be challenging. In recent years, Turkish energy policy objectives have almost entirely rested on the objective of becoming a regional gas hub for Caspian, Russian and possibly Mediterranean energy. The emergence of the new untapped resource in the Eastern Mediterranean may be a source of tension with regard to control of the resources as long as the division of Cyprus and the Lebanon-Israel dispute over the gas fields continue. The American Nobel Energy and Israel's Delek Group have been involved in the ongoing feasibility studies including a proposition to interconnect the fields through an underwater pipeline. Although

advanced LNG technology exists and may be used to liquefy and export the gas to Asia, due to the distance between the future production location in the Eastern Mediterranean and the most lucrative market for gas being the EU, the most efficient and advantageous mode of transporting the resources to the EU markets would be via Turkey through a dedicated Cyprus-Turkey pipeline. (Glain, 2012) Yet again, the newly emerging gas production region may require infrastructure investment to turn it into a commercially viable project. Strong economic arguments suggest that the three Eastern Mediterranean countries should cooperate to achieve the best outcome. Cooperation is said to require 'the development of confidence-building measures and the political will to create a new modus vivendi in the eastern Mediterranean'. (Onoufriou, 2012, p.4) However, this necessitates a wider perspective that takes into account not just one of the three broader regions but the Shared Neighborhood as a whole.

Conclusion

Over the last two decades natural gas has become the fuel of the future of energy security. A number of factors contributed to this with the Fukushima disaster being the most recent one; it changed an almost decade-long discussion about safe nuclear power while prompting decisions by a number of governments on the phasing out of nuclear technology or putting moratoria on nuclear energy. Natural gas is yet again in the driving seat but to fully conceptualize the opportunity a broader operationalization of the three 'energy security' regions is needed.

The need for new infrastructure and the upgrade of the existing one is a mutual concern in the Shared Neighborhood comprised of the tripartite regions of the Eastern Neighborhood, the Black Sea/Caspian region and the Mediterranean. It is in the interests of energy consumers, producers and transit states (both existing and aspiring ones) to facilitate new interconnections between sources and markets. Russia, which remains the main player in the gas markets of the EU and the Eastern Neighborhood, has made efforts together with its European partners to expand the existing infrastructure. This trend should continue and shared ownership of large scale projects should be encouraged. After a decade-long discussion about energy security 'values' between the EU and Russia, the completion of an internal

energy market has been prioritized in Brussels. While much time and energy have been spent on the legal aspects of the energy market reform, functional change is required and can be achieved by facilitating more interconnections between isolated and not fully integrated gas markets within the EU. This, in turn, would truly allow for the common perception of supply security as the gas pool could be shared between EU member states, particularly amongst the most vulnerable ones in CEE. Restrictions on shale gas fracking in the United Kingdom have been lifted subject to the exploration of the resource being carried out in a safe and environmentally-protecting manner. (Harvey and Vaughan, 2012) The British experience with shale gas so far may, and should, be taken into account in the discussion regarding resource exploration in CEE. The promise of shale gas in Poland, if realized, may help improve the energy security of the EU; it should also be coupled with a spillover across the borders to the Baltic States and the Eastern Neighborhood. The emerging resource may help to justify and accelerate the commissioning of new gas infrastructure in the region to the expectation of many in the area. Equally, Russia's conventional gas superpower status may be further enhanced when its shale gas exploration intentions become operational. These developments may, in turn, be beneficial in helping Ukraine to overcome its energy policy impasse between the EU and Russia. Ukraine still has a lot to offer in terms of transit and, most significantly, the storage of natural gas.

The blessing of new conventional gas findings in the Eastern Mediterranean may pose a greater challenge in the Shared Neighborhood due to political instability and the discord over the exploration and production of natural gas. Cyprus, Israel and Turkey all have too much to lose if engaged in conflict over the resources. The three states should search for the optimal solution to engage in cooperation and the commercialization of these gas reserves. In fact, Ankara's ambition of becoming a fully fledged gas hub could come to fruition if additional gas volumes could be added to the existing supply mix.

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About the CIES

The Center for International and European Studies (CIES) at Kadir Has University was established in 2004 as the Center for European Union Studies to study Turkey's European Union accession process. Since September 2010, CIES has been undergoing a major transformation by widening its focus in order to pursue applied, policy-oriented research and to promote debate on the most pressing geostrategic issues of the region.

Its areas of research and interaction include EU institutions and policies (such as enlargement, neighbourhood policies and CFSP/CSDP), cross-cutting horizontal issues such as regional cooperation, global governance, and security, inter alia with a geographical focus on the Black Sea Region (including the Caucasus), the Mediterranean, Southeastern Europe, Turkish-Greek relations, and transatlantic relations.

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The Neighbourhood Policy Paper series is meant to provide the policy, research and professional communities with expert input on many of the important issues and challenges facing, in particular, the Eastern neighborhood of the European Union today as they are written by relevant experts. The analysis provided along with the relevant policy recommendations strives to be independent and not representative of any one particular perspective or policy. These papers will also be translated into Russian so that they are accessible to the Russian speaking world in an attempt to enlarge the scope of the dialogue an input on Black Sea Region-related issues. The key priority is to maintain the focus of the policy debate on the Black Sea Region and the wider region.

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