# *THE CASPIAN LEGAL STATUS AND RIPARIAN PRODUCERS' OUTLOOK ON THE EUROPEAN COMMISSION'S STRATEGY TOWARDS THE FOURTH/SOUTHERN GAS CORRIDOR*

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## INTRODUCTION

The aim of this paper is to determine the prospects for the full implementation of the European Commission's (EC) strategy towards a Fourth/Southern natural gas corridor (SGC), under the precondition that the legal status of the Caspian Sea will be defined in due course, a development that will enable EU access to a wider number of gas producers, beyond Azerbaijan, among the Caspian littoral states. Such a scenario would suit: a) the full utilization of the capacity of the under-construction SGC pipe network (projected to almost double by 2030), b) the response to the parameters spelled out in the 2015 Energy Union Package with regard to supply diversification (energy sources, suppliers and routes), in order for the dependence on gas imports through Russian-controlled pipelines to be reduced.

This paper mainly argues that, should the European Union (EU) manage to approach more Caspian exporter countries, as dictated by the fundamental concept surrounding the creation of a southern transit gas pipeline system, articulated at the onset of the 21st century, it will, consequently, be able to decrease Gazprom's role (to be performed by means of Turk Stream or IGI Poseidon) during the next stage of filling the additional SGC capacity, after 2020. The hoped-for settlement of the Caspian legal status, foreseen for August 2018, as well as of the bilateral row between Azerbaijan and Turkmenistan over a disputed oil and gas field falling within their maritime boundary, could pave the way for the critical eastward extension of SGC, i.e. for the materialization of a Trans Caspian Gas Pipeline (TCGP) running from Turkmenbashi to Baku, and possibly also connected to Kazakhstan's Tengiz field, in order to serve up the EU's pursuit for further diversification of natural gas supplies.

The first part of the paper examines in detail the steps taken towards the regulatory framing of SGC as an EU-devised idea, harmonized with the neo-functionalist spillover logic, which was put into effect in response to gas supply crises erupting in the 21st century through the Ukrainian transit corridor. Subsequently, the SGC state of play, as well as estimations on the forthcoming advances in pipeline construction and bids for pipeline capacity, with emphasis on Gazprom's keenness on Trans Adriatic Pipeline (TAP) as a Turk Stream link to the EU, is thoroughly described. The project history of TCGP is then brought into focus, taking into account the thus far unresolved Caspian legal status and the Azeri-Turkmen wrangle about sovereignty over the Serdar/Kyapaz field, which constitute the main obstacles to its implementation. Finally, the importance of TCGP in strengthening economic growth and regional cooperation among the three coastal states involved in the project is equally analyzed.

## 1. SOUTHERN GAS CORRIDOR: EMERGENCE AND REGULATORY FRAMING OF AN EU-CONCEIVED IDEA

### 1.1 Conceptualization and significance of energy security

According to the IEA definition (Checchi et al. 2009), ‘’security of gas supply’’ is ‘’the capability to manage, for a given time, external market influences which cannot be balanced by the market itself.’’ In the short term, the notion ‘’covers the adequacy of supply and capacity to avoid unforeseen interruptions to customers under rare and extreme events.’’ In the long term, ‘’it includes the capacity to mobilize investment to develop supply and infrastructure as well as the insurance to ensure reliable supply.’’

The aforementioned explanation is assiduously reflected in the EU energy security policy, a policy firmly established upon the principles of regulation and liberalization of m-s’ energy markets, as well as of the markets of those third countries exporting energy and energy products towards the EU, and upon the principle of supply diversification, as enunciated by Winston Churchill over a hundred years ago (Abbasov 2014; Yergin 2012: 267; Korteweg 2017). Security of gas supply has always been an EU priority of utmost importance in guaranteeing: 1) uninterrupted energy flows, 2) equitable application of rules governing competition within a fully-integrated internal energy market, 3) resolution of foreign policy and security issues by the EU without the influence of exogenous blackmail (Paul & Gurbanov 2017).

Therefore, it is made evident that EU’s diachronic commitment to exploring alternative gas import routes is justifiably maintained. The concept of a Fourth/Southern gas transit corridor, in addition to already existing Northern (Norway), Eastern (Russia) and Western (North Africa) corridors, appears to be in full line with the explicit EU energy policy intentions. That is because SGC implementation opens a new and competitive gas import route for Europe, from a promising, in terms of hydrocarbon reserves, starting point, namely the Caspian Sea, outside of the remit of Gazprom, at the moment the biggest exporter to the EU, as proved by the 6.6% increase in deliveries during the cold snap that stroke Western Europe during the first quarter of 2018 (versus Q1 2017 data), which was also topped by a new monthly record of 19.6BCM in March 2018, surpassing the previous 19.1BCM ceiling of January 2017 (Sharples 2018). Overall, the world’s biggest listed hydrocarbon producer, who ended up holding a notable 13% worldwide market share in 2017 (Bros 2018), increased H1 2018 exports to Europe by 5.8% to a record 101.2BCM, while CEO Aleksey Miller does not preclude the possibility of export volumes rising to 200BCM later on this year (Tass 2018).

Indeed, even though the EU has been largely relying on Russian gas exports for more than four decades now, it is commonly accepted that an increase in this sort of dependence would not be compatible with the Bloc’s security of supply precept (Paleoyannis 2008). As a result, it is argued that SGC serves the long-term EU goal of energy security against the backdrop of a

continuously changing geopolitical environment and in the course of transitioning to a low-carbon economy (Lahn et al. 2009).

### 1.2 First institutional steps

As developed industrial countries, but concurrently devoid of energy resources to be reckoned with, it is logical for the EU m-s to support the opening-up of the Caspian and Central Asian economies, with the overriding objective of creating a stable business climate for private investment and securing their gas supply via new and reliable import routes (Dekmejian & Simonian 2003: 140). It goes without mention that the EU strategy on this matter has not been commonly agreed upon from the very outset; on the contrary, its formation went through a process involving deliberations and initiatives extending from the bilateral to multilateral level.

Indicatively, the EU-funded Interstate Oil and Gas Transport to Europe (INOGATE) program has already been active for more than 20 years, having evolved into one of the longest-running bilateral technical support bodies, focusing on the convergence of energy markets in eleven Eastern Europe, Caucasus and Central Asia partner countries with EU legislation and standards (INOGATE 2015). In the context of INOGATE, some ECU50M were already invested since 1996-1999 into, among other things, feasibility studies examining alternative energy routes, especially from or across the Caspian (Leray 1999).

EU's insistence on promoting its commercial interests and private investments of its m-s in the Caspian, instead of the mostly geopolitical US priorities in the same geographical space, gradually led to the conclusion of multilateral agreement forms. The Energy Community Treaty, signed in Athens in 2005, aims at extending the common energy market rules to contracting parties in Southeastern and Eastern Europe, provided that they are equally willing to abide by the *acquis communautaire* (Wilson 2015). Acquisition of observer status to the Treaty by Turkey, the first transit country in Europe's east through which the Caspian natural gas will reach European customers, is a disappointing development for Brussels and European energy companies' executives, however it couldn't be shunned due to lack of progress on the opening of accession chapters for Ankara (Winrow 2009).

Accordingly, it is made clear that the SGC strategy forms integral part of the EU external governance and that achievement of energy security necessitates the spillover of European policy norms to third countries (producers and transit states) by taking advantage of both bilateral and multilateral instruments (Abassov 2014). Apart from regard shown for the *acquis* dissemination to its energy partners, EU has also gone a long way towards the regulatory framing of its idea on supply diversification and undistorted competition within its territory. The Proposal for a Directive of the European Parliament and the Council concerning Measures to Safeguard Security of Natural Gas Supply was put forward by EC in 2002 along with another three

proposals on various aspects of security of energy supply as part of a ‘’security package’’ (Haghighi 2007: 149).

Two years later, the relevant Council directive 2004/67/EC was adopted on the basis of Article 100 EC, according to which ‘’the Council, acting by a qualified majority on a proposal from EC, may decide upon the measures appropriate to the economic situation, in particular if severe difficulties arise in the supply of certain products’’ (IAAEU n. d.). The introduction of a framework to secure the unhampered functioning of the internal natural gas market, whose establishment had been inaugurated by directives 98/30/EC and 2003/55/EC, would ineluctably render m-s all the more interdependent as for security of supply. Thence, a failure to adopt security measures in one Member State was said to have grave economic impact on another, making a minimum level of harmonization between security measures indispensable, as stated in EC’s proposal (Haghighi 2007: 150).

### 1.3 The 2006 transit crisis

EC’s apprehensions about security aspects of gas supply were verified in 2006, when m-s were faced with the first in a series of gas crises stemming from the Ukrainian transit corridor since the 1992-1995 period, when Gazprom systematically withheld gas volumes destined to EU customers, in response to the Crimea declaration of independence and Kiev’s decision to cease transfer of its tactical nuclear weapons to Russia’s control, in violation of the Lisbon Protocol (Tsakiris 2011: 55-56). In particular, the breaking-off of Russian-Ukrainian gas ties, resulting from Naftogaz’s swelling debt to Gazprom, brought about a 10-35% decrease in Russian gas exports to several European countries in the first three days of 2006, thereby exacerbating destabilization of the Ukrainian gas transit up until December 2008 (Tsakiris 2011: 95).

At the meeting of the Gas Coordination Group, held on January 4, Energy Commissioner Andris Piebalgs congratulated the two sides on settling their dispute, but didn’t neglect noting that the incident would cause EC to look again at dependence on Russian energy and gas supplies and to reappraise energy security issues (Stern 2006). At the time, EU seemed to have realized the geopolitical challenges entailed in security of supply, since ‘’ some major producers and consumers have been using energy as a political lever’’, according to a 2006 EC paper for the Council, indirectly criticizing Gazprom’s tactics (EC 2006).

Under these circumstances, an intra-EU dialogue on supply security and diversification within a common energy market was initiated, highlighting the development of ‘’a southern gas corridor for the supply of gas from Caspian and Middle Eastern sources’’ as ‘’one of EU’s highest energy security priorities’’, according to EC’s 2008 Second Strategic Energy Review on an EU Energy Security and Solidarity Action Plan (EC 2008). It should be noted that reconsideration of the EU stance on Russian gas supplies, following the first energy crisis of the 21st century, coincided with: 1) the commissioning of the

Baku-Tbilisi-Erzurum pipeline, the first SGC segment, by a BP-led consortium b) the first Shah Deniz (SD) gas flows to Turkey, starting from July 2007, and the discovery of a new high-pressure reservoir in a deeper structure of the SD field, a couple of months later, in that same year (Coote 2017).

### 1.4 The 2009 transit crisis

Meanwhile, Ukraine's inability to cover the cost of Russian gas imports for the period of November-December 2008, combined with the -unpleasant for Moscow- failure of negotiations between Yulia Tymoshenko and Viktor Yanukovych on forming a coalition government, inevitably paved the way for an early-2009 gas supply crisis (Tsakiris 2011: 116-117). Gazprom once again shut off its spigot for Kiev and Europe once again ended up losing out in this development, because, until January 14, many of its industries were unable to function properly, as a result of the concomitant energy deficit (Voulgarakis & Grammatikakis 2016).

In view of this precarious gas supply situation, the European Parliament and the Council adopted in July 2009 three regulations and two directives dubbed as Third Energy Package (TEP)[1] with the aim to further liberalize and integrate Europe's energy markets. Directive 2009/73/EC, or else Third Gas Directive, concentrates on the term of ''ownership unbundling'', i.e. the appointment of the network owner as the system operator and its independence from any supply and production interests, so that the inherent conflict of interests is resolved and that security of supply is ensured. It, moreover, underlines the need for implementation of a system of ''third party access'' (TPA) to those systems, plus LNG facilities, based on published tariffs, applicable to all eligible customers. As for TEP's Regulation No 715/2009 on conditions for access to natural gas transmission networks, it introduces the provision of gas trading taking place at ''hubs'' with growing ''liquidity''[2]. The SGC pipe network is often considered one of the infrastructure components that could allow for the emergence of a hub in SE Europe, where gas would be sold at spot and futures pricing, instead of being oil-indexed, providing that investments in storage capacities, alternate LNG supplies and exploration of indigenous production potential are likewise made.

The single energy market regulation quickly became the theme (and often the point of controversy) of regular informal consultations between Russian energy professionals and m-s' energy regulators and transmission system operators (TSOs), along with EC representatives, instituted a couple of months after TEP's entry into force. By the end of 2011, the EU-Russia Gas Advisory Council (GAC), consisting of three working groups (forecasts and scenarios, internal markets, infrastructure) was also established, in order for

[1] Despite it entering into force in September 2009, TEP was finalized in 2017 with the addition of two network codes, on incremental capacities and tariffs.

[2] The vision of transitioning from point-to-point contractual relations to entry-exit trading regimes is reflected in the Gas Target Model (GTM), a non-legally binding policy document developed by the European regulatory authorities in 2011, that guides EC through an architectural change of its gas market (Yafimava 2018).

the two sides to jointly diminish risks and uncertainties of their bilateral dialogue to the tolerable level (Konoplyanik 2018).

Meanwhile, in February of the same year, the coordinator of implementation of all SGC-related pipeline projects (Nabucco, ITGI, TAP, White Stream), appointed to this post following Decision No 1364/2006/EC laying down guidelines for trans-European energy networks (TEN-E), Jozias Van Aartsen, stressed in its historic activity report the strategic importance of making available for the EU ‘’new sources of gas in the Middle East and the Caspian region’’ (Aartsen 2009). van Aartsen went even further and, instead of limiting the realization of the particular connection to the Azerbaijan-Georgia-Turkey supply chain, he put forward the development of a demand aggregator in the Caspian, provisionally called the Caspian Development Corporation (CDC), designed to enable the reclusive, but gas-abundant, Turkmenistan to sell large volumes of natural gas for delivery to Europe, an initiative equally requiring Turkey’s engagement (Aartsen 2009· CERA 2010).

It is worth mentioning that EC had itself raised the issue of the creation of CDC, about a year earlier (EC 2008). Nevertheless, the plan was met with a dubious reception due to it being marked by competition concerns (Talus 2011: 31). In any case, van Aartsen’s text points out to the participation of the biggest possible number of Caspian gas producers to the envisaged pipe network as the quintessence of the Fourth/Southern gas corridor – and it was the first time that such an argument was articulated by an EU official. A few months later, CDC returns to headlines, this time as part of the agenda of the ‘’Southern Corridor -New Silk Road’’ summit, held in Prague. As stated in the summit declaration (signed by the EU, Azerbaijan, Georgia, Turkey and Egypt), establishment of ‘’direct connections between both sides of the Caspian Sea’’ is ‘’one of the main important elements of the effective energy cooperation’’ and favors ‘’the interconnection of the Southern Corridor with the EU through strategic infrastructure projects’’ (EU Delegation to the UN 2009· Livanios 2013).

### 1.5 The near-crisis of 2014

Since then, the EU ratcheted up efforts to deter potential short-term supply disruptions. The deployment of international monitors to inspect the flow of Russian gas that travels to the EU through Ukraine and to make sure that flow is not interrupted (Spiegel 2009), the Joint EU-Ukraine Declaration of March 23rd, 2009, on the modernization of the latter’s gas transit system (Naftogaz 2009), as well as the repeal of Council Directive 2004/67/EC by Regulation No 994/2010, introducing an infrastructure standard whereby m-s must guarantee they can satisfy total gas demand in the event of a disruption of the single largest infrastructure (known N-1 standard[3]), all contributed towards the fulfillment of the aforementioned goal.

[3] N-1 indicator refers to a situation in which a very important national gas installation, such as a production facility or pipeline, falls out of operation. In case of a N-1-type disruption, national

Despite all these measures, gas flows to the EU market via the Ukrainian corridor were once more put at risk amidst the unfolding of pro-Russian autonomist tendencies in Eastern Ukraine. In the wake of Yanukovich's ouster, in February 2014, Gazprom announced a 30% increase in the price of natural gas destined to Ukraine (Voulgarakis & Grammatikakis 2016). In April of that same year, the Russian presidency addressed a letter to eighteen European leaders, warning about a new supply cut-off, if Kiev was not to settle its accumulated debt (Russian Presidency 2014). The pressure exerted by the Russian natural gas flagship on Ukraine was threatening for a third time, after 2006 and 2009, the wider EU gas supply.

Against the backdrop of an imminent natural gas shortage crisis and the overall deterioration in relations between the EU and Russia owing to rising tensions in Eastern Ukraine, EC published, in the beginning of 2015, its Energy Union Package, confirming the prevailing logic of institutional spillovers, in form of additional legislative and regulatory measures, traditionally surrounding the EU-Russia energy dialogue, as a tool for building resilience against exogenous supply shortfalls. (Stuwe 2017). Building on its 2014 Energy Security Strategy, EC now calls upon policy makers at national and European level to make clear to EU citizens the choices involved in reducing dependency on particular fuels, suppliers and routes, like the completion of the internal energy market, transparency and development of solidarity and trust ties among m-s, and the intensification of work on securing energy imports from the Caspian via the Fourth/Southern Corridor (EC 2015a).

In fact, the above rationale formed the nucleus of the Dubrovnik MoU addressing the closer integration of the EU and Energy Community markets, as well as the security of gas supply in Central and Eastern (CEE) and in Southeastern Europe (SE), which was signed in July 2015, in the context of the Central and South-Eastern European Gas Connectivity (CESEC) initiative. The MoU text underlines the objective for CESEC countries' infrastructure to have access to at least three different supply sources for reasons of cost-efficiency. In addition, it was agreed that diversification for the region can principally come from the SGC sources and LNG facilities (EC 2015b), a clear

competent authorities and natural gas undertakings are required to ensure gas supplies to private households and other vulnerable consumers, like hospitals, under severe conditions, defined as either a 7-day temperature peak (statistical probability of once in 20 years); or at least 30 days of exceptionally high demand (same statistical probability); or at least 30 days without the single largest infrastructure working (average winter conditions). In February 2016, EC proposed improvements to Regulation 994/2010, as part of a sustainable Energy Security Package, including the facilitation of reverse gas flows at cross-border interconnectors (Wilson 2016). Regulation 994/2010 was finally repealed on October 25th, 2017 by Regulation 2017/1938, introducing a solidarity principle that prioritizes households and essential social services during an emergency situation, a regional (instead of national) approach when designing security of supply measures, implying tighter cooperation among EU neighbors (including Energy Community countries), and the notification obligation covering existing long-term contracts (LTCs) that are relevant for security of supply (28% of the annual gas consumption in m-s).

indication that geographical proximity of the signing parties to the Ukrainian transit corridor may pose challenges to their future energy imports.

Intensification of the level of institutional response to precedent experiences of energy flow disruptions made the EU realize the importance of sticking to its diversification doctrine, and, consequently, of bringing back into play plans for an eastward SGC branch across the Caspian Sea. It is no coincidence that on the day of publication of EC's Energy Union Framework Strategy, its Vice-President in charge of the Energy Union, Maros Sefcovic, announced Europe's intention to work out a technical and legal basis for the Turkmen gas supply via Azerbaijan, mainly because the EU considered the long-discussed TCGP a PCI, standing for ''project of common interest'' (Indeo 2015).

## 2. SOUTHERN GAS CORRIDOR TODAY: EVALUATION OF THE FUTURE DEVELOPMENT AND EXPLOITATION OF THE PIPELINE TRANSPORT SYSTEM

### 2.1 Present state of affairs

#### 2.1.1 Shah Deniz 1 and South Caucasus Pipeline

Following a brief overview of the institutional steps towards minimization of security of supply risks, it becomes obvious that the Fourth/Southern Gas Corridor has turned into an EU priority project, since it is able to satisfy goals of supplier diversification and, simultaneously, expedite transition to clean energy, as all EU-promoted cross-border natural gas infrastructure could, at some point, be used to transport and/or store renewable gas, or even carbon-free blue hydrogen (Alvera 2018). Today, the existing and under construction SGC pipe network (South Caucasus Pipeline, Trans Anatolian Pipeline, Trans Adriatic Pipeline) stretches over 3,500 kilometers across seven countries, while the total investment in its route is estimated at USD45bn (Prahl & Weingartner 2016: 61).

Implementation of this gas supply chain started out in 2003, when the consortium of the BP-operated Shah Deniz gas field, discovered offshore Azerbaijan in 1999 with a production sharing agreement (PSA) dating back to 1996, made a final investment decision (FID) on the first phase of the field development, as well as on the construction of the Baku-Tbilisi-Erzurum or South Caucasus Pipeline (Coote 2017). The 692km line, with a capacity of 25BCM, was designed to run in parallel to the already commissioned Baku-Tbilisi-Ceyhan oil pipeline. With the exception of a short-term suspension of shipments, decided by BP for security reasons during the 2008 Georgia-South Ossetia conflict, gas transport from SD via SCP has been generally maintained stable from the end of 2006 onwards (Kakachia 2011). Since then, domestic politics and international relations of Georgia, who was chosen as transit state instead of Armenia by reason of the still ongoing Nagorno-Karabakh conflict with Azerbaijan, are tightly linked with the progress towards successful completion of the SGC and, therefore, closely followed.

### 2.1.2 TAP's dominance over Nabucco West

On 17th December 2013, SGC entered a new development phase ensuing from SD consortium's preference in favour of TAP project, instead of the long-debated Nabucco West (Kusznir 2015). The particular choice emanated from as set of political and economic factors. Nabucco pipeline was supposed to reach CEE countries, i.e. the main geographical area affected by the 2006 and 2009 transit shocks, whilst it was estimated that it would boost liquidity at the Central European Gas Hub in Austria's Baumgarten, one of the most important physical and virtual gas trading points in Continental Europe, and Nabucco's end-station. Financial support of this admittedly extensive line under the European Energy Program for Recovery (EEPR) spurred controversy between the interested central and eastern buyers and Germany, the country who would bear the heaviest burden of contribution to the program funding.

Notwithstanding a high-level policy conference on Nabucco, held by the Hungarian government and the Czech EU presidency in Budapest, in January 2009, and in contempt of prompting by Hungary, Poland[4] and the Czech Republic with respect to the coverage of pipeline costs, even directly by means of the EU budget, Germany will stress, in March of the same year, through Chancellor Angela Merkel, its opposition to such a prospect. Germany remained firm in its skeptical approach to the project on account of (among other reasons[5]) the blackmailing attitude adopted by Turkey, Nabucco's last transit country prior to it entering the EU territory, in relation to the opening of the energy chapter of its EU accession (Tsakiris 2011: 215-216). On the basis of accusations raised by the at the time German Economy Minister Michael Glos, Turkey was believed to be using the proposed 3,400km pipeline as leverage in its mired bid for EU membership (DW 2009).

Finally, Nabucco was granted a place in EEPR, receiving just EUR400M, when its overall expected costs had soared to EUR7.9bn (EC 2013a). On top of that, the late inclusion of France's GDF Suez (now Engie) in the consortium, replacing the withdrawn German RWE, who previously owned a 16.1% stake in the project (Reuters 2012), created the impression that the consortium was made up of smaller companies, prone to unforeseen policy shifts and regulatory peculiarities in each m-s.

Needless to say, the 2013 decision to abandon Nabucco was not made solely on political grounds but is also attributed to technical flaws of the pipeline

[4] Even though the 31BCM/a capacity project would run, starting from the Turkish-Bulgarian border, across Bulgaria, Romania, Hungary and Austria, PGNiG, Poland's state-run natural gas firm, had expressed interest in the construction of a Nabucco expansion from Baumgarten to the Polish territory via Slovakia (Reuters 2009).

[5] For a broader analysis of the reasons behind Germany's unsupportive stance on Nabucco, see Liakopoulou, M. 2017a. Europeanization in Times of Crisis: Adaptation of Northern and Central and Eastern Europe to EC's Policy towards the Southern Gas Corridor during the 2009 and 2014 Gas Crises. Available online (in Greek) at: https://liakopouloumariana.wixsite.com/energy/blog/krisis-i-prosarmogi-voreias-kai-kentroanatolikis-eyropis-stin-politiki-toy-n [Accessed 8 July 2018].

itself. The project's defenders used to claim that the Italian and Western European markets, where TAP would head, are efficiently diversified and overly supplied. However, the perspective of building from scratch domestic natural gas markets in EU hopefuls from SE Europe, like Albania, Bosnia-Herzegovina and Montenegro, with the help of the proposed Ionian Adriatic Pipeline (IAP), constituted TAP's comparative advantage over Nabucco (TAP 2015a). Moreover, doubts were cast on whether Baumgarten actually had the capacity to transport Nabucco's 31BCM/a to Western European markets without additional investment in the grid (Niftiyev & Macit 2013). Above all, TAP consortium managed to convince SD shareholders that it would provide a higher gas sales price minus transportation costs (netback) than Nabucco West, via a relatively shorter and cheaper pipeline route (Koranyi 2014).

The 878km-long TAP expands Europe's ability to use reverse flows, since it can ship Caspian natural gas northward, to the Kula-Sidirokastro line and the planned Interconnector Greece-Bulgaria (IGB) (Prahl & Weingartner 2016: 62), thus contributing to supplies via the so-called Vertical Gas Corridor[6], on the Greece-Ukraine axis. Its capability to connect to other planned or existing pipelines, such as IAP, IGB, Trans-Austria gas pipeline (TAG), heading towards Central and Eastern Europe, Transitgas pipeline, heading to Germany and France through Switzerland, by utilizing swaps and reverse flows, renders TAP cost-effective. Lastly, another substantial benefit of the project is the addition of underground storage facilities, in order for gas supplies not to be put at risk during gas transit crises, like the ones experienced in the past (Wisniewski 2015).

It should be noted that in 2013 TAP gained full exemption from TPA rules (Article 32 of Directive 2009/73/EC) regarding its initial 10BCM/a capacity, upon a market test implementation, and from ownership unbundling rules (Article 9 of Directive 2009/73/EC) for the entire project[7], under the relevant Shah Deniz gas sales agreements over a period of 25 years (EC 2013b; TAP 2015b). The exemption was to lose its effect in the event that the construction of the pipeline hadn't started by 16th May, 2016, and that it would be put in operation no later than 1st January, 2019. This practically means that the further 10BCM of the project's second phase would be allocated through open season auctions (Sartori 2013). However, in 2015, following postponement of the date of TAP's entry into operation up to the end of 2020, EC and energy regulatory authorities of Greece, Albania and Italy agreed to prolong the validity period of the pipeline's exemption (Euractiv 2015a). EC's approval took into account the delay in the progress of upstream infrastructure, which was considered to be ''beyond TAP AG's control'' and, consequently, ''a major obstacle'' to the timely commercial operation of the project (EC 2015c).

[6] On 19th July 2017, in Bucharest, representatives of natural gas grid operators from Greece (DESFA), Bulgaria (Bulgartransgaz), Romania (Transgaz), Hungary (FGSZ) and ICGB, IGB's contractor, co-signed an MoU on the implementation of the Vertical Gas Corridor (Transgaz 2017).

[7] Nabucco West had been granted only a 50% exemption from TPA rules (Williams 2016: 55).

### 2.1.3 TANAP pipeline and SOCAR's ''problematic monopoly''

TANAP is the connecting link between TAP and SCP, running all the 1,841km distance from the Georgian-Turkish to the Turkish-Greek border, at Kipoi, regional unit of Evros, northern Greece. In June 2012, Recep Tayyip Erdogan, at the time Turkey's Prime Minister, and Ilham Aliyev, Azerbaijan's President, co-signed a binding intergovernmental agreement (IGA) and host government agreement (HGA) governing project implementation (Official presidential website of the Azerbaijan Republic 2012). The Azeri state-run oil and gas firm SOCAR holds a majority stake (58% from an earlier 80% prior to BP's acquisition of a 12% in 2015) in the project, in a consortium with the Turkish BOTAS (Socor 2014). In November 2014, a year before the official groundbreaking of TANAP in Kars, Turkmenistan inked an outline deal with Turkey to supply gas to a new pipeline that could help Europe reduce its dependence on Russian gas imports (Hurriyet 2014), proving the intent, at that stage, of more than one Caspian players to diversify their exports towards the EU market.

Although it sets in motion the SGC supply chain, from a geographical point of view, TANAP is not subject to TPA rules, since Turkey is an observer -and not a member- to the Energy Community. Therefore, SOCAR maintains the right to enjoy full control of natural gas transit via TANAP, including allowing the transit of additional gas volumes and setting transit tariffs, unless the EU makes concessions, such as the opening of accession chapters for Turkey and/or Turkey's inclusion in the Energy Community, as well as visa liberalization for Azeri citizens and/or greater involvement in the de-escalation of the Nagorno-Karabakh conflict, in exchange for a wider Turkish/EU stake in TANAP (Koranyi 2014).

The chill in relations between Brussels and Ankara, triggered by the encroachment on citizens' human rights and civil liberties by the Turkish administration in search of those culpable for the 2016 putsch (HRW 2017), as well as the widespread international criticism levelled against Brussels over hesitation in promoting a democratic agenda in Azerbaijan (Ghazaryan 2014: 134), discourage the EU from pursuing such diplomatic activity for the time being. In absence of the EU-exerted ''soft power'' over its energy partners, SOCAR will keep holding the upper hand through majority ownership of TANAP and Turkey's reliability as a transit state will continue to appear challenging. Whether SOCAR's ''monopoly'' over TANAP, in combination with EU's difficulty in exercising influence over events in Turkey, will, in the near term, favor the conclusion of a Turkmen-Azeri agreement on the sale of Turkmen gas solely to the Azeri market via a Trans Caspian Pipeline, leading to the utilization of SGC's remaining capacity exclusively by Azerbaijan, and thus negating EC's supply diversification rhetoric, remains to be seen.

### 2.2 Considerations for the future evolution of the network

#### 2.2.1 The expected increase in SGC capacity and Europe's gas demand trends

Despite problems detected in terms of its progress to this day, SGC is well on track to reach plateau level of 16BCM/a (1BCM of which will be contracted by Greece, 1BCM by Bulgaria and 8BCM by Italy and adjacent markets, while 6BCM are earmarked for Turkey). The project was officially inaugurated by President Aliyev in late May 2018 at the BP-operated Sangachal oil and gas terminal (Euractiv 2018), or else the SGC's point of departure, located some 55km southwest of Baku and processing oil from the Azeri-Chirag-Gunashli (ACG) oilfield cluster and gas from SD, flowing via subsea pipelines. A ceremony to launch TANAP's Phase 0 followed soon after in Turkey's Eskisehir (SGC 2018). At the end of June 2018, consortium partners kicked off commercial natural gas deliveries to Turkey, as they brought online SD 2, BP's landmark USD28bn upstream project off Azerbaijan (Oil and Gas Journal 2018). In 2018, 2BCM will be shipped through the expanded SCP (SCPX), the creation of which involved the laying of new pipeline in Azerbaijan and the building of two compressor stations in Georgia (BP n.d.), and TANAP. The 6BCM plateau, contracted for Turkish buyers, will have been gradually attained by 2020-21.

Meanwhile, loan disbursements from the European financial institutions have been allocated for single project segments, signifying SCG's high place on EU's diversification agenda. Between February and March 2018, EU's lending arm, the European Investment Bank (EIB) approved loans of EUR1.5bn for TAP and EUR932M for TANAP, amidst turbulence in the European Parliament induced by a motion tabled by a group of Green MEPs to exclude major gas infrastructure projects from EC's PCI list, on the basis of their incompatibility with the EU's commitments under the Paris Agreement. The motion was largely voted down. All three SGC mega-pipelines, along with the still unrealized TCGP, can be found among the 173 priority energy projects comprising the third version of the particular catalogue, published in November 2017 (Liakopoulou 2018a). Moreover, between 2017 and 2018, the board of the European Bank for Reconstruction and Development (EBRD) approved loans of USD500M and EUR500M for TANAP and TAP, respectively (EBRD 2018a). More than a fourth of SCG's total expenses of over USD40bn (around USD11.5bn) falls to the share of Azerbaijan, who has tried to meet obligations including through placement of Eurobonds with a full sovereign guarantee. SOCAR's stakes in the SGC's key links (SD 2, SCPX, TANAP, TAP) will be financed by 51% by Azerbaijan's State Oil Fund (SOFAZ), while remaining funding will be raised by SOCAR, who mostly seeks to attract external financial support from international banks (Gurbanov 2017).

With the Greek and Albanian parts of TAP on the road towards effectuation, nine European companies (Shell, Bulgargaz, DEPA, Uniper, Engie, Hera Trading, Edison, ENEL, Axpo) have already concluded deals to purchase

SGC gas (Shahbazov 2018). In April 2018, the Italian Edison and SOCAR signed a 25-year gas sales contract providing for SD 2 gas supply to the former starting from 2020. The Greek DEPA has, since 2015, booked a 1BCM/a capacity in TAP and will terminate a 0.7BCM/a (of Azerbaijani gas) LTC with Turkish gas incumbent BOTAS in 2020, a year ahead of its expiration, deeming its terms unconducive in view of forthcoming Azeri supplies via TAP. Furthermore, the DG-approved acquisition of a 66% stake in the Greek gas grid operator (DESFA) by a consortium composed of three of TAP AG shareholders (Snam, Enagas, Fluxys) will save the company money, as DESFA could now undertake operation and maintenance of the pipeline, expanding its domain beyond regulated activities, i.e. operation of the national gas distribution network and the Revithoussa land-based LNG Terminal (Liakopoulou 2017b).

However, the newly-elected Italian administration's decision to review TAP's ''underlying rationale'' (Reuters 2018) threatens to undermine efforts of EU firms to diversify their portfolios by profiting from transparent and non-discriminatory access to different supply sources. Up until now, TAP has been met with resistance from activists in Puglia region, southern Italy, due to it crossing a contested area, planted with centenarian olive trees.

Of course, the start-up 10BCM/a volume allotted to the EU represents a trifling 2% of the Bloc's overall gas consumption (Koranyi 2014). Nevertheless, the hope is to cover 20% of European gas needs within the next years (Kusznir 2015). This is why TANAP is scalable to 23-31BCM/a by 2023-2026, providing the FID will be made on the construction of five additional compressor stations, while two extra compressors could double throughput of TAP to 20BCM/a, as regulatory authorities of Greece, Italy and Albania decided that an extra 10BCM/a would be enough to carry non-SD 2 sources (TAP 2017; Paul & Gurbanov 2017). As already mentioned, during the past six years and in the context of SD 2, BP has been implementing the expansion of SCP capacity from 7-8BCM/a to 22BCM/a, in order for the pipeline to correspond with the capacity of TANAP (Socor 2012· BP 2016).

That said, the question logically arises as to where the extra gas is going to come from, so that emerging capacity gaps in the SGC network are properly filled and, correspondingly, so that shipping costs drop and investing companies' netback margin widens. In this case, the Caspian region, whose proven and estimated hydrocarbon reserves are conservatively approximated at 48 bn bbl of oil and 8.3TCM of natural gas, but who lacks open-sea access to international markets, qualifies as a solution for perfecting the SGC strategy, since prospective implementation of TCGP could link Europe to additional riparian producers, like Turkmenistan and Kazakhstan (Mavrakis et al. 2006).

Meeting the supply diversification aim by means of encouraging contribution of new producer-countries from the Caspian to the SGC network takes on special significance, if one thinks of the upward demand and the downward

output trends in the EU. The second one is further precipitated owing to the continuous depletion of North Sea production and the Dutch government's decision to close Groningen, EU's biggest gas field, by 2030, in the aftermath of consecutive tremors linked to the 55-year-long extraction. Given the carbon price increase witnessed in 1H 2018, as a result of EU measures targeted at squeezing out oversupply and reducing emissions, as well as the nuclear phase-out pledges by m-s like France, Belgium and Germany, natural gas will unavoidably have a role to play in the EU energy mix until 2040-50, and possibly beyond. That is because coal-to-gas switching can buy time for the transition to a higher renewables grid penetration (Honoré 2017). Therefore, despite the 2015 claims about Europe having passed the point of peak gas consumption, natural gas has ended up in an advantageous position regarding its use in the residential, industrial and transport/marine/HGV sectors for the past three years. Projections remain positive, at least for the short term, as long as carbon prices are kept high and m-s stick to promises on coal and nuclear plant shutdowns. Besides, EC's Directorate-General for Energy boss has himself lately deflected many observers from the dogmatic ''full electrification'' vision towards a more balanced power-to-gas approach (Borchardt 2018).

Although, according to IEA gas forecasts to 2023, mature net importing markets, including Europe, are expected to see their natural gas demand stagnate (IEA 2018), DG Energy report on European gas markets for 4Q 2017 mentions that, driven by growing gas-fired generation, EU gas demand in 2017 increased by 6% to 491BCM, reaching the highest level since 2010 (DG Energy 2018). The fact that Ukraine (Brotherhood pipeline and the Balkan route) continues to be the main supply corridor of Russian gas shipped to the EU (39%), even with a rerouting of a notable share of Ukrainian transit via Nord Stream, that accounted for 34% of total EU imports from Russia, demonstrates the necessity to work on alternative import routes, now that gas transit via Ukraine is far from certain after the end of 2019, when Gazprom's existing gas transit contract with Naftogaz expires (Sharples 2018).

### 2.2.2 Gazprom and TAP

EU's focus on priming the pump for the construction of the 300km-long and USD5bn-worth TCGP, slated to transport some 30BCM/a by connecting Turkmenbashi to Baku, and maybe also to western Kazakhstan (Rasizade 2002· Beskid & Baranec 2015), gains in momentousness against the likelihood of Gazprom taking TAP's extra 10BCM capacity through the post-2020 open seasons for the purposes of its Turk Stream or IGI Poseidon projects. That is because, in parallel with Europe, Russia has initiated implementation of its own vision on a southern gas supply corridor, in order to completely disentangle from the Ukrainian transit route for obvious political reasons and amidst renewed Gazprom-Naftogaz tensions over a February 2018 tribunal by the Stockholm Arbitration Court, that has been diversely interpreted by each of the two sides. The Russian-designed southern corridor is a multi-level natural gas distribution plan, extending from the western

Siberian fields all the way to Russkaya compressor station, at the Russian Black Sea coast, and aiming at boosting export activity to SE Europe (Gazprom 2012).

At the end of 2014, Moscow abandoned, once and for all, South Stream over Turkish Stream, as the EC deemed IGAs, inked with host countries on the onshore pipeline sections, in breach of TEP, threatening infringement procedures against m-s like Bulgaria, in case of failure to renegotiate or renunciate them (Stern et al. 2015). The thaw in Russian-Turkish relations, following a fleeting resurrection of enmity because of the shootdown of a Russian Su-24 attack aircraft by Turkish F-16s in the Turkey-Syria border area (BBC 2015), brought the 31.5BCM/a two-string pipeline back to the forefront. At the moment, work has been completed in laying the deep-water section of the first 15.75 string, to which a certain amount of gas, presently delivered through the Trans Balkan pipeline, will be rerouted post 2020. Along with TANAP, it will give Turkey spare import and re-export capacity, providing it successfully negotiates the destination clause removal from the extended contracts with Gazprom (Rzayeva 2018).

Expeditious procedures on the signing of construction contracts and financing agreements running for both Turk Stream and a second Vyborg-Greifswald line of Nord Stream, from the Bovanenkovo gas field in the Yamal peninsula along the Baltic Sea bottom, are explained by the need to prevent direct financial impact on the two projects caused by US-levied sanctions against Russia and its energy sector among nationwide reactions on Kremlin's alleged meddling in the 2016 US presidential election[8], signed by President Donald Trump into law in August 2017 (Reuters 2017). Moreover, Gazprom this way attempts to solidify its dominance in the EU gas market, promoting itself as a low-cost supplier against the price-competitive, but comparatively more expensive, especially in midst of imposition of protectionist tariffs on national security grounds, American shale gas, that seeks to penetrate into Eastern Europe. One should not forget that the settlement of a seven-year DG COMP antitrust case against Gazprom by obliging it to align its traditional oil-indexed price mechanism in the CEE with Western European benchmarks and to remove territorial restrictions from LTCs (EC 2018a), actually gives the company a chance to demonstrate some kind of flexibility ahead of a surge in LNG imports to its target European market.

Considering the above, it is understood that SGC implementation, because of being interwoven with Turkey's multifarious and fluctuating attitudes, could at any time be affected by a strategic strengthening of the Russian-Turkish diplomatic bonds[9] (Paleoyannis 2008). As a result of its size and the speedy

[8] The bill forbids US entities from working on projects in which Russian firms own more than a 33% stake.

[9] In line with the Independents' efforts to win domestic and international market share from Gazprom, Rosneft could take advantage of TANAP's expanded capacity -and block access for other potential exporters from the Caspian- for the purposes of a planned 30BCM/a pipeline from Northern Iraq. Nonetheless, the fate of this project is subject to negotiations

progress in laying subsea parts of Line 2, Turkish Stream constitutes a potential competitor to TCGP, should Gazprom opt for the still envisaged utilization of TAP's additional capacity of 10BCM after 2020. This will basically mean that Gazprom will have taken advantage of the EU principle of open TPA, on which TAP will have to operate with regard to subsequent deliveries. Thus, both Turkmen input and the next wave of Azeri gas, a loose term characterizing a cluster of projects (Absheron 1 and 2, Umid-Babek gas condensate fields, Qarabag, Shafag-Asiman structure, prospective SD 3), will be hampered from getting to European customers (Roberts 2015).

Meanwhile, European officials do not consider this unlikely. In March 2015, a DG Energy advisor confirmed that ''to the question can they (e. n. Gazprom) use TAP, from a regulatory and political perspective, the answer is yes'' (Euractiv 2015b). Three out of six TAP shareholders had also expressed views in favor of a possible cooperation with Gazprom during the 2017 European Gas Conference in Vienna (Natural Gas Europe 2017). Hence, if Azeri projects encompassed in international consortia's portfolios -or in expectation of a PSA with one or more IOCs-, as well as TCGP, do not forge ahead any time soon, Gazprom will turn out to be the most inclined to take part in TAP's open season (Roberts 2016), a development that will render TANAP less commercially attractive (Winrow 2016: 100).

Moreover, TAP's capacity could be alternatively sought after for the purpose of reviving IGI Poseidon, another pipeline branch of the Russian version of a southern gas supply corridor. The Greece-Italy Adriatic link was initially numbered among the SGC-related PCIs (Aartsen 2009) but was given up in the wake of SD consortium's FID on TAP. Nevertheless, on February 24, 2016, CEOs of DEPA and Edison, together forming IGI Poseidon company, a 50-50% joint venture, signed an MoU with Gazprom on the unfreezing of the project and its exploitation in the context of the planned ''natural gas deliveries across the Black Sea from Russia via third countries to Greece and from Greece to Italy''[10] (Gazprom 2016). As stated by the Deputy Chairman of Gazprom's Management Committee, Alexander Medvedev, the state-controlled gas behemoth does not, for the time being, exclude the possibility of the utilization of TAP capacity in order to realize Poseidon project (RNS 2017). In July 2018, IGI Poseidon SA submitted its application for the construction of an Independent Natural Gas System (INGS) to RAE, the Greek energy regulator (Energy World 2018), meaning that what the consortium has in mind is an actual pipeline running parallel to TAP, rather than a plan to make use of TAP's spare capacity. But one has to wait and see how things are going to unfurl till RAE's approval or denial of a permit.

between the Iraqi Kurdistan and the newly elected central government in Baghdad, that will begin once the election result is ratified, on the legitimacy of past oil and gas contracts, concluded without the central government's approval.

[10] The three parties reaffirmed their mutual trust in June 2017, on the sidelines of Saint Petersburg International Economic Forum, this time agreeing ''on cooperation to create the southern route for Russian gas supplies to Europe'' by means of both Turk Stream and the Poseidon project (Tass 2017).

Regardless of TAP representing a zero-cost option that could spare Gazprom from multi-billion investments into an all new physical connection of Turk Stream towards key hubs like Italy or Austria, politics is enough to lead to a revision of this option. For one thing, ties between Greece and Russia have, in a rare case of tussle, been put under strain over alleged attempts of Russian diplomats to foment opposition to a bilateral agreement with FYROM resolving a 25-year dispute over the neighboring country's name, which brought an invitation to join NATO (Euronews 2018). Even before that, omission of Turk Stream from a presentation of energy projects believed to be turning Greece into a regional hub, held at the Greek MFA in May 2018, did not go unnoticed by the Russian media (Neftegaz 2018). At the same time, a rapprochement between Russia and Bulgaria was instigated by the latter's decision to end a moratorium on the Belene nuclear power plant and ambitions on the creation of an EU-promoted Balkan gas trading hub in the port of Varna, to be fed with gas from Russia, Azerbaijan, Turkmenistan, LNG from Greece, as well as potential Bulgarian and Romanian deposits. Consequently, Gazprom might well divert part of existing supply, currently entering Europe via Ukraine, using a more viable -if present contracts with European partners are to be borne in mind- extension of Turk Stream's second line through Bulgaria, instead of TAP or IGI Poseidon (Tagliapietra 2018). This revisited -and politically more convenient- South Stream version will consist of a planned Bulgaria-Serbia interconnector and an upgraded -and under reverse-flow operation- Hungary-Serbia pipeline.

## 3. TRANS CASPIAN GAS PIPELINE: THE ENERGY DIMENSION OF THE EU-CENTRAL ASIA RELATIONS

### 3.1 Project history

The TCGP project idea, incorporated among the infrastructure projects of the wider Trans Caspian corridor[11], is not a solution to the EU's search for diversified gas suppliers that arose solely out of the necessity to react to today's geopolitical developments. On the contrary, this subsea interconnection, that could also branch out to the Chevron-operated Tengiz oil and gas field in Kazakhstan, thanks to a multiply delayed 600km-long onshore line to the Turkmenbashi seaport, was first worked out back in 1996, when it was intensively lobbied by the Clinton administration. In 1999, the Turkmen government approved two –eventually successful- preliminary feasibility studies on the project that were carried out by the US-based energy firms Enron and Unocal and financed by the US administration (Kuniholm 2000: 112; Parkhomchik 2016). In that same year, a consortium by PSG International (a joint venture of US firms Bechtel and the GE Capital unit of General Electric) and Shell contracted to construct TCGP and, soon after, representatives of Azerbaijan, Georgia, Turkey and Turkmenistan were

[11] Completed and under execution Trans Caspian Corridor infrastructure is comprised of: the BTC crude oil pipeline, SGC pipeline sections, the C5+1 Transport Corridor Development project, the Baku-Tbilisi-Kars rail link project, the Trans-Caspian International Transport Route, construction of various Caspian Sea trade ports.

gathered in Istanbul to sign an agreement supporting the project (Granmayeh 2004: 24).

However, the pipeline stalled due to the failure of Azeri and Turkmen negotiators to agree on a demarcation of their Caspian Sea border due to a bilateral dispute over three oil-rich sections on a trans-boundary sea territory: Azeri (Khazar/Omar), Chirag (Osman) and Kyapaz (Serdar). Another reason behind procrastination was the fierce opposition from Russia and Iran, based on ecological concerns and the unsettled Caspian legal status, and literally translating into unease of the two allies over the reinforcement of the American and Turkish influence in the post-Soviet space (Dekmejian & Simonian 2003: 78; Brill Olcott 2004; Tekin & Williams 2011: 153). Under these circumstances, in early June 2000, PSG announced the closure of its offices in Baku and Istanbul, along with the dramatic reduction of its spending, following the refusal of Turkmen President Saparmurat Niyazov to commit to the project (Soligo & Myers Jaffe 2002: 126). It later pulled out of the TCGP consortium, passing negotiation rights on to Shell, after failure to reach an agreement with President Niyazov, who regarded the price offered by TCGP for Turkmen gas as too low (AGOC 2000).

European interest in the SGC's eastward extension was reinvigorated after the gas transit crisis of 2006. Having met with EU Energy Commissioner Andris Piebalgs in May 2006, Kazakhstan's Energy Minister Baktykozha Izmukhambetov said that his country supported a gas pipeline across the Caspian Sea and would send a proposal for a relevant feasibility study to the EC (Coote 2017). But in May 2007 Russia secured a counter-agreement with Kazakhstan and Turkmenistan on the renovation and expansion of the western leg of the Gazprom-controlled Central Asia-Center pipe network, shipping Central Asian natural gas to international markets (Konyrova 2007).

In the aftermath of the 2009 crisis, European and US discussion on TCGP was recommenced, this time in relation to the commercial viability of Nabucco (Dokos et al. 2012; Sartori 2012). From 2013 onwards, following SD consortium's FID in favor of TAP, TCGP can be traced in EC's PCI list. European financial institutions, such as the EIB, have in their turn expressed interest in supporting TCGP through loans and guarantees (Natural Gas World 2012).

Given the commissioning, since 2015, of the 30BCM/a East-West gas pipeline, via which Ashgabat can now direct indigenous natural gas towards the Turkmen coast of the Caspian, the way couldn't be more open for the EU to make even more strenuous efforts in order to be supplied by the holder of the world's fourth largest gas reserves (Prahl & Weingartner 2016: 63). Besides, initiatives such as the occasionally signed energy MoUs between the EU and the three littoral states involved in TCGP, with the Ashgabat declaration as one of the most recent examples (EC 2015c), give greater prominence to EU's diplomatic engagement in bringing the project to fruition.

### 3.2 Commercial viability

Reservations, maintained, already from the late nineties, by the TCGP consortium about the project's economic and commercial viability (Lyle 1999), were, and to this day remain, a bulwark against EU energy diversification planning. According to an analysis by the Energy Institute of Houston University, published in Oil and Gas Journal (1999), TCGP transit countries would definitely benefit from the project (ranging from USD480M to USD608M). Although these numbers will have to be revised today, the report's argument that TCGP could yield positive returns for Turkmenistan, Azerbaijan, Georgia and Turkey, as it will offer them access to a diversified supply portfolio, resulting in lower domestic gas prices, topped by the collection of transit tariffs, is still valid.

Economic concerns constitute an all-time hurdle to TCGP progress (Bahgat 2007). Unavoidably, with Azerbaijan in charge of financing and overseeing TANAP and TAP, and with Turkmenistan generally financing export pipelines that do not stretch beyond its national border, the EU appears to be the only candidate left to undertake the politically perilous task of TGCP's financial support (Indeo 2015). Indeed, resulting from its inclusion into the third PCI list, in early 2018 TCGP was granted EUR1.872M from the EUR30bn Connecting Europe Facility (CEF) fund, after an application by W-Stream Ltd, the promoter of both TCGP and White Stream pipeline projects, for pre-FEED work (EC 2018b). According to the Georgian Energy Ministry (2017), two USD11M study proposals, including sea-bed survey and FEED, had been submitted on 11 October 2017, in order for the project to qualify for EU financing.

A big part of the project's commercial viability will at this point depend upon the simultaneous construction of White Stream pipeline, across the Black Sea, especially as Transgaz has launched Phase 1 of the reverse-flow Bulgaria-Romania-Hungary-Austria (BRUA) pipeline, kicking off work on three compressors and the 479km Podisor-Recas segment (Transgaz 2018). Gas from this TCGP second string is expected to have reached Romania by 2022. And it is certain that Turkmenistan will have little appetite to export gas through TCGP's first string unless it has confidence that the second string, requiring White Stream's construction, will also be built (Cutler 2018).

## 4. THE LEGAL STATUS OF THE CASPIAN SEA: A DETERRING FACTOR VIS-À-VIS THE TRANS CASPIAN GAS ROUTE

### 4.1 The divergent views on the Caspian division

Albeit technically feasible, TCGP has proved extremely difficult to get on track from a political standpoint, keeping the EU and the broader international investment interest in the project at modest levels during the past years. This stems from the fact that the up until today unresolved legal status of the Caspian Sea poses a substantial obstacle to bringing online the missing SGC piece betwixt the Turkmen and Azeri shores.

Historically, the Caspian Sea has formed an example where traditional control of territory is meeting with a newer, commercial-based means of allocating resource benefits. In lack of clear boundaries or resource distribution pacts among all coastal countries (Russia, Iran, Azerbaijan, Turkmenistan, Kazakhstan), commercial and military competition over who gets what in the Caspian inescapably intensifies (O'Lear 2004).

Prior to the 1991 collapse of the USSR, the Caspian Sea was shared by Iran and the USSR. The two countries enjoyed a stable relationship based on the treaties of 1921 and 1941. (Sheikhmohammady et al. 2012). Controversy over the legal status of the world's largest inland body of water was originally triggered in January 1994, when Russia protested Azeri and Turkmen attempts to unilaterally set sea boundaries and contested the signing of the Contract of the Century[12] by Azerbaijan and a consortium of Western oil companies (Dekmejian & Simonian 2003: 20). Since then, the particular dispute has hindered opportunities for regional cooperation, particularly touching upon the establishment of Trans-Caspian energy corridors. Specifically, while Baku and Ashgabat, both supported by the EU, argue that the project affects the interests of only two littoral states and, hence, can be materialized upon bilateral consent, Iran and Russia object that the construction of TCGP cannot move forward without first resolving the issue of the international legal status of the Caspian (Latypov 2014).

At the core of the discord lies the question of whether or not Caspian waters should be considered a lake or a sea. In the first case, international law dictates that a convention should be signed by all five neighbors, dividing the entire waterbed into national sectors or zones meeting at an equidistant median line. In the second, each party will maintain authority over the waters down to 20 nautical miles from the shore, beyond which navigation is free and fishing and other exploitation rights should be either unlimited or defined by either bilateral or multilateral agreements (Green 2017). For the moment, the involved countries' views diverge on the preferable division principle.

Notably, Azerbaijan, Kazakhstan and Russia coalesce on a division into national sectors conforming to a median line (principle of equidistance), basically considering the Caspian an international border lake with its surface maintained for blanket use. They, thence, advocate a delineation of the Sea's mineral resources and shelf, leaving superjacent waters for navigation of all riparian countries. The three states' position derives from a division of the Caspian seabed into Kazakh, Azerbaijani, Russian and Turkmen sectors based on equidistance back in 1970 by the Oil and Gas Ministry of the USSR. Azerbaijan believes that this type of division, rooted in the international law principle of uti possidetis juris and mostly privileging itself, Russia,

[12] PSA inked on September 20, 1994, between SOCAR and a consortium of eight Western signatories, including the likes of BP and Statoil, calling for a total USD7.4bn investment over 30 years in ACG oilfield cluster (Azerbaijan International 1994). In September 2017, several years before its expiration, BP decided to extend the deal to 2049 and increased SOCAR's share to 25% from 11.65%.

Kazakhstan and Turkmenistan by apportioning them larger sea equities for hydrocarbon exploration in line with their respective coastal areas, can be accepted as a departure point for delimitation negotiations (Garibov 2017).

On the other hand, Iran originally adopted a condominium approach, i.e. joint management of the Caspian Sea, based on the aforementioned treaties with the USSR. Later on, Tehran slightly revised its opinion in order to secure a more reasonable percentage, in comparison with the frivolous 13% it would get with the use of the median line. It now says that the Caspian must be equally divided into 20% sections, to the detriment of fellow littoral states, and does not limit this division to the seabed only (O'Neil et al. 2011· Diba 2015). Of course, despite Iranian claims, geological evidence indicates that hopes for rich oil reserves are close to zero and those for gas remote in the Iranian section of the Caspian (Green 2017). It should be stressed that in the mid-nineties Russia endorsed Iran's option (Dekmejian & Simonian 2003: 23), but it gradually adopted a more consensual approach upon the 2003 closure of a trilateral deal with Azerbaijan and Kazakhstan on the delimitation of adjacent sections of the Caspian (Sheikhmohammady et al. 2010). Nonetheless, Iran throwing a wrench in the works towards settlement of the Caspian legal status seems to, in the long run, serve Russian interests regarding estrangement of the three landlocked -and newly independent- Caspian republics from the EU, including in the realm of energy cooperation.

Finally, Turkmenistan rejects any reference to the 1970 division, which leaves the Serdar/Kyapaz oil field, owned by Azerbaijan but claimed by Turkmenistan, under Baku's jurisdiction (Garibov 2017). Ashgabat, similarly with Tehran, calls for an equity division, so that each coastal addressee will be entitled to a 20% section. But it simultaneously insists on using a rather unconventional median line delineation method, embodying measurement of the equidistant point from land along successive lines of latitude[13], because this alternative allows the country to assert a claim to a large part of Azerbaijan's ACG offshore oil complex (Coote 2017).

### 4.2 The disunity over the Caspian pipeline regime

As for the laying of pipelines on the seabed of the Caspian Sea, a lack of unanimity is once again observed, as echoed by provisions proposed by Azerbaijan/Kazakhstan/Turkmenistan and Russia/Iran in the draft Caspian status convention. Here, one should take into consideration that if Caspian is defined as an inland sea, fully apportioned among coastal countries, TCGP construction would be made possible through the Turkmen and Azeri zones. In case of it being defined as a lake, everything beyond a narrow fishing area will need to be jointly administered by all parties, including Russia and Iran (Macaes 2016).

[13] The conventional approach involves measurement of the equidistant point from the closest point of land, without considering latitude or longitude (ibid.).

Proposals by Russia and Iran up to now ruled out the possibility of laying subsea trans Caspian pipelines upon unilateral decision, setting out as a prerequisite for such projects the approval of an ecological expertise by all coastal states. Additionally, transit countries, in the opinion of Moscow and Tehran, will have to bear responsibility for possible material damages negatively affecting other parties, as well as the marine environment, due to a break-up of the pipeline. This position excludes coastal privileges recognized by the United Nations Convention on the Law of the Sea (UNCLOS) regarding rights on laying pipelines. On the other hand, Azerbaijan, Kazakhstan, and Turkmenistan express the view that each of the coastal states exercises the right to lay submarine trans Caspian pipelines. Such a right shall be based on an agreement concluded exclusively between states whose seabed mining site is crossed by the routes of these pipelines. This proposal complies with the provisions of UNCLOS relating to the rights and obligations of states on the laying of submarine pipelines (Janusz-Pawletta 2015: 103). Still, it should be underlined that the Caspian, according to several legal takes, is not deemed to meet the criteria of the 1982 convention covering enclosed and semi-enclosed seas (O'Lear 2004).

### 4.3 The contentious Serdar/Kyapaz field and the Azeri-Turkmen rapprochement

Aside from differing views held by riparian states on the preferable division of the Caspian and the stipulations for laying submarine pipelines, there is yet another issue pertaining to the Caspian situation, and particularly to the regime for the use of its non-living resources, that obstructs the EU-desired SGC expansion across the Caspian seabed. A still undeveloped lucrative hydrocarbon patch, called Kyapaz by Azerbaijan and Serdar by Turkmenistan, is located on the median line between the two countries. A 2008 US-brokered bilateral agreement commits the two sides to refrain from geological prospecting-exploratory works on the deposit until the ownership dispute is resolved (Abbasov 2012).

The offshore Kyapaz/Serdar oil and gas field, bearing geological resemblance to the giant ACG block of oilfields, was discovered by Azeri geologists back in 1959. Its extractive stocks are believed to total 50-100Mt of oil and some over 30BCM of natural gas. Throughout the nineties, Azerbaijan and Turkmenistan dived into licensing activity. In 1997, SOCAR came close to signing a contract on the field development with Rosneft and Lukoil. But the Turkmen President Saparmurat Niyazov succeeded in securing Russia's support on his country's dispute with Azerbaijan, a fact that led to the subsequent cancellation of the deal by Boris Yeltsin (Dekmejian & Simonian 2003: 94).

The political aggravation of Turkmen-Azeri ties has repeatedly perturbed the West, with the threat by the Turkmen President Gurbanguly Berdymukhamedov to take the issue to the International Arbitration Court, in 2009, as well as the detention of a Turkmen exploratory vessel, sent to carry out work on the field, by the Azerbaijani border service, in 2012, serving as

characteristic reference points (Kupfer 2017). EC's mediation towards abatement of the squabble, by way of coordination of talks held in Vienna by mid-level delegations from Azerbaijan and Turkmenistan in late 2010 (MEES 2010), was not just a direct interference in order to breathe new life into the stranded Nabucco project. In effect, it was also the EU's first foreign energy policy effort that aspired to neutralize a key source of regional instability, a potential flash point literally lying in the middle of the TCGP route (Rzayeva & Tsakiris 2012).

Today, the requirement for external diplomatic supervision of a perpetuating tiff is progressively superseded by the recognition that the diversification of Turkmen gas export routes constitutes a vital element for the financial security of both countries involved. With Gazpromexport having interrupted, since 2016, Turkmen natural gas imports to Russia[14] and Ashgabat's nearly complete dependence on exports to China -skyrocketing to 80% of its overall exports in 2015, almost all of which was natural gas- via Central Asia-China pipeline[15] (Batsaikhan & Dabrowski 2017), Turkmenistan realizes the importance of its contribution to the further development and profitability of the almost ready SGC pipe network. An official visit paid by Berdimuhamedov in Baku, in August 2017, and joint statements with President Aliyev on plans to expand cooperation in the energy field (Tariverdiyeva 2017) have resuscitated TCGP, that will to the same degree avail Baku through transit tariffs for gas being shipped via Azerbaijani territory to the EU. A later invitation by Turkmenistan asking for Azerbaijan's collaboration in the Galkynysh-associated TAPI pipeline project is indicative of the good will demonstrated by the two governments in connection with their precocious gas alliance. Ultimately, where financial interests of states and participating companies are implicated, legal setbacks might seem easier –albeit not more effortless- to overcome.

### 4.4 Russia, Iran and the Caspian LNG alternative

Regardless of a rewarming of relations between Ashgabat and Baku that could lay the foundations for a common agreement on the Serdar/Kyapaz development, the Caspian legal status, whose settlement is still pending after

[14] Used to purchase over 40BCM/a of Turkmen gas, Russia's imports from Turkmenistan tumbled from an 11BCM/a average between 2009 and 2014 to just 4BCM in 2015. In that same year, Gazprom filed a lawsuit in the Stockholm Arbitration Court demanding revision of prices by Turkmengas (Putz 2016).

[15] Consistent with the incremental trend of the past two years, in H1 2018 Turkmenistan delivered nearly 20% more natural gas via CAGP than in the same period of 2017 (Trend 2018). Within the framework of China's OBOR initiative, a fourth CAGP line via Uzbekistan, Tajikistan and Kyrgyzstan has been in the making in order to ship a whopping 30BCM of Turkmen gas. Upon completion of the so-called Line D, CAGP will reach a nominal capacity of 85BCM/a, expanding Turkmenistan's gas exports to China to 65BCM/a (Indeo 2018). In a development cuttling the project timeline, construction of the link's Uzbek portion was indefinitely suspended in March 2017 under the cloak of technical hurdles, so that China is pressured to further invest in the region. Instead, Uzbekistan has now gotten embroiled in discussions to undertake either a technical or financer's role in Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline (Liakopoulou 2018b).

four presidential summits and tens of special working group meetings at the level of deputy foreign ministers and foreign ministers' meetings, holds back the finalization of EU's SGC strategy.

The pervading discordance has led to the swift militarization of the Caspian in recent years, strongly reminding of a frozen conflict setting. Given that Russia's naval might in the region remains unquestionable, Moscow could conceivably block TCGP by placing a naval vessel in its path, especially since it enjoys the political support of Iran, the Caspian country with the second strongest navy (Coote 2017). Besides, it was only a few years ago that Russia flaunted its essential superiority in this geographical area by ordering a Caspian Flotilla frigate and three destroyers to launch cruise missiles at 11 targets in Syria, hitting sites in Raqqa, Aleppo, and Idlib provinces (Macaes 2016). The use of military power to limit Azerbaijan's, Kazakhstan's and Turkmenistan's room for maneuve on TCGP construction would ratchet up geopolitical entanglements in the Caspian, making clear Russia's aspiration to display its prowess, in response to the US pursuit of political and economic reorientation of the three former soviet republics away from Moscow and China's yearning to increase its economic clout in the region.

Preying upon the littoral states' inharmonious views on the Caspian legal status, Iran also endeavors to thwart building of TCGP. For this reason, it has recommended that Turkmen gas be shipped to TANAP and from there on to Europe via Iranian territory. However, this suggestion of Tehran, who has to once again redefine its relationship with the West in the post-JCPOA era as a result of renewed US sanctions, imposed much to the disappointment of EU officials, entails the construction of two 30BCM lines, one heading towards the Iranian-Turkmen and another towards the Turkish-Iranian border, for the transportation of gas from the giant South Pars field. Both of these projects are in south-north direction, meaning that there is not a single pipeline connecting Iran's north-east (Turkmenistan) to north-west (Turkey), and thus Iran appears to be in no near-term position to route Turkmen gas towards Europe (Shaban & Khatinoglou 2015).

Amidst a sharpening currency crisis, prompted by sinking natural gas prices, and exacerbated by Gazprom's withdrawal from its market and onerous terms featured in its pay-for-purchase agreement with China, Turkmenistan proposed in late 2017 a gas-swap deal with Iran to get Turkmen gas to Turkey, where it could be pumped into TANAP. The offer was rebuffed by the Iranian National Gas Company (INGC) director, Hamid Reza Araki, as the two countries have been enmeshed in a quarrel over Ashgabat's demand that Tehran pay some USD2bn for supplies to its poorly-interconnected North during the rigid winter of 2007-08. Iran accused its eastern neighbor of a nine-fold increase in the back then usual price (at USD360/1,000CM), Turkmenistan reacted with an utter halt of gas flows starting from January 1st, 2017, and the two have now been threatening to seek arbitration in their dispute (Pannier 2017). Even so, Turkmenistan's gas swaps with Azerbaijan and Armenia have been preserved by Iran.

Meanwhile, Iran has taken steps towards linking its northern regions to its gas-rich South, and hence towards lessening its import reliance on Turkmenistan, by bringing online the Damghan-Neka gas pipeline, with a throughput capacity of 40MCM/d (Oil and Gas Journal 2017). In an unexpected move, in April 2018, Mr. Araki expressed INGC's readiness to collaborate in swapping gas from Turkmenistan to Pakistan (IRNA 2018a). Presupposing that Turkmenistan is positively disposed to this idea -and it might well be in order to boost its slagging, resource-based economy-, the US-opposed Iran-Pakistan-India gas pipeline will gain new life at the expense of the slowly progressing, and foundered on the security situation in Afghanistan, TAPI. Whatever the outcome of the INGC-Turkmengas deliberations on the Pakistani-Turkmen swaps, thorny diplomacy between Iran and Turkmenistan, exposed to an imminent recourse to international arbitration, as well as the absence of an Iran-Europe pipeline (South Pars-Turkey), even less likely to be built now that Western firms are winding down their Iranian businesses, unable to secure a waiver from US sanctions, all point out to the fact that Iran cannot be, at least for the moment, thought of as a prospective SGC contributor.

In order for Baku, Ashgabat and Astana to be able to defy obstacles to TCGP posed by their two larger fellow states in the Caspian vicinity, there are a couple of voices raising attention to the LNG option. Back in 2007, EC had conducted a preliminary feasibility study for the transport of liquefied petroleum gas (LPG) from Kazakhstan and Turkmenistan to the EU, understanding the need for consideration of alternative projects as a possible way of delivering Caspian gas to Europe without the threat of causing environmental damage, as Russia -and Iran- is concerned about in the case of TCGP (Yenikeyeff 2008). Another alternative with a low carbon footprint, which has not yet been discussed at EU or coastal governments' level, suggests the exploitation of the existing SGC infrastructure, complimented by a USD5bn-worth gas pipeline, running from Erzurum to the port of Ceyhan, where a USD20-30bn-worth LNG plant will be erected. This way Azerbaijan and other Caspian producers will benefit from flexibility with gas sales, while the three governments will have to wait neither for the resolution of the Caspian legal status nor for Russia's and Iran's consent, as only an IGA on a marine compressed gas project (CNG), a synergy of which with LNG can efficiently serve both local and global markets, adding significant value to offshore gas field development (Stenning et al. n. d.), would be enough to incite westward exports of Caspian gas (Steuer 2017).

However, this overly ambitious concept could be faced with US demurrals. It is well known that the US has been preparing the ground for an organized entry into the EU energy market, at first through symbolic -but politically weighty- exports from Cheniere's Louisiana-based Sabine Pass terminal to Poland, Lithuania and the Netherlands, and, in the longer term, through systematic exports to the Balkans and the CEE via the Vertical Gas Corridor, upon commissioning of planned FSRUs in northern Greece and on the

Croatian island of Krk. Striving to stave off a looming trade war, EC reiterated its firmness in getting even more US LNG to Europe for supply diversification purposes, in exchange for its counterpart's leniency over punitive tariffs on European auto exports to the US, after a recent White House encounter of Jean Claude Juncker with Donald Trump (EC 2018c). EU net LNG imports rose by 7.5Mt, or 19.5%, in 2017, resulting from higher power demand due to hot weather, but overall European share of global LNG imports has nearly halved from 29.4% in 2010 to 15.9% in 2017 (Lewis 2018). Projections to 2035 classify Europe on the second place in the net importers' list, well below southeast Asia, with 17Bcf/d (BP 2017).

Since 2016, the US shale boom has more or less transformed the flow of cargoes in the global LNG market. Having so far made it to 26 countries by vessel, it is expected that, over the next five years, the current nameplate liquefaction capacity of 3.1Bcf/d of LNG exports will grow by another 6.9Bcf/d, while, by 2025, the US is forecast to be producing some 92Bcf/d and will rank as one of the world's leading net exporters (Yergin & Andrus 2018). For all that, varying price spreads in Asia and Europe, transparent -but increasingly less legible- pricing contract terms and marginally more flexible marketing strategies -Korea, Mexico and China accounted for close to 50% of overall exported volumes by November 2017- all show that US has work to do in order to position and discern itself amongst conventional LNG exporters (Tsafos 2018).

In the domestic realm, the much-needed new greenfield projects are getting costlier because of longer review proceedings and steel-import tariffs, a relief from which has been periodically -and mostly to no avail- requested by mid-streamers, as is the case with Cactus II pipeline in the Permian Basin, the US hotbed of oil and associated gas (Committee on Ways and Means 2018). In Europe, the fundamental question has to do with the time horizon over which its contracted purchasers will be willing to pay a premium (with liquefaction fees ranging from USD2.25-3.50/MMBtu) to lift US LNG in an oversupplied market, rather than opting for more traditionally structured, oil-price-related suppliers, such as Qatar or Australia (Barnes & Stanic 2017). Since early 2016, US LNG shipments to Europe are assessed at 41 cargoes, representing about 10% of total US LNG exports (Malik & Collins 2018).

With the full cost of bringing additional capacity to the global market (at around USD7–8/MMBtu) predicted to temper long-term global LNG price expectations, American LNG is moreover challenged by Russia, an undeniably late-comer to the LNG game (Boersma et al. 2018). A ceremony of the first tanker loading under the Yamal LNG project, owned by Novatek (50.1%), Total (20%), CNPC (20%) and China's Silk Road Fund (9.9%), took place in December 2017. Since then, North Siberian cargoes have been dispatched to Spain, China and, even earlier than that, to Boston, despite the sanctions regime, and due to the previously spoken of infrastructure and legislative constraints within the US, as well as to the increasingly globalized nature of LNG trade, determined by diversion to the highest bidder, in order

for firms to be able profit from sensible arbitrage opportunities (Medlock 2009). They have also kept busy EU's under-functioning import facilities, especially at the main Northern European hubs, even during summertime, and have largely driven reloads out of Europe, in view of rising Asian prices. Gazprom, who sees its monopoly menaced by independents, is also involved in the Sakhalin LNG project.

That explained, a supplementary source of competition, reflected in shipments of Caspian LNG to the EU from a strategically located plant in Ceyhan, benefiting from short-distance access to the Mediterranean, would further intricate the already complex mission of the US, in the hunt for an estimable European market share for its own shale gas, that will not be limited to gas shortfalls during peak demand periods.

### 4.5 The Aktau summit: Towards a resolution?

After some 22 years of perpetual and futile consultations, the five party leaders are going to assemble on August 12, 2018, in Aktau, Kazakhstan, where it is highly probable that the draft Convention on the Caspian legal status will eventually be signed. As highlighted in previous sections of this paper, the chief bones of contention have been the division principle and endorsement procedures for submarine pipeline and cable infrastructure. So, what is different this time?

According to the draft Convention text, heedlessly leaked for a couple of hours on a Russian government website after its approval by the Russian Prime Minister Dmitry Medvedev, the littoral states' territorial waters are defined as not exceeding 15 nautical miles from coastlines, while a further 10 nautical miles are defined as exclusive fishing zones, with common use of resources in the rest of the sea (Rambler 2018). As stated in Article 6, sovereignty of each side extends ''beyond its land area and inland waters to the adjacent sea zone, determined as territorial waters, as well as to the seabed below and airspace above this area (Interfax Azerbaijan 2018). This means that the use of a modified median line method is confirmed and Iran's equal twenty-percent-share division is ruled out. The text delicately shuns phrasing of demarcation measures based on accurate geographical coordinates. Instead, it leaves sectoral delimitation of the Caspian seabed and resources subject to agreements among neighboring and opposite states, that should take into account generally recognized principles of international law (Fergana 2018). Thereby, accountability on outlining precise delimitation contours will henceforth lie with bilateral and/or trilateral decision-making formats.

This outcome, if officially passed in Aktau, has been more or less adumbrated by the fact that the modified median line is, since the start of the 21st century, used under bilateral and trilateral deals sealed by riparian countries, with the exception of Iran. For its part, Tehran has, not long ago, come to terms with Baku over joint development of hydrocarbon deposits falling within their Caspian maritime boundary (Tasnim 2018). The Alov-Araz-Sharq, as called

by Azerbaijan, or Alborz, as called by Iran, oil and gas field, located 120km southeast of Baku, immediately leaps to mind, even if the discussed MoU doesn't mention any concrete block names. The two states' dispute on Alov/Alborz had taken a military dimension back in 2001, when BP was carrying out exploration work in the area (Biresselioglu 2011: 76). According to the document, a joint Azeri-Iranian oil company will have to be founded, so that the agreed-upon partnership is promoted. Through this venture, the Islamic Republic hopes to gain steady access to international financial markets, since, as was stated by Deputy Oil Minister Zamaninia, ''Washington's withdrawal from the JCPOA will not affect the Iranian cooperation with Azerbaijan's SOCAR'' (IRNA 2018b). This compromise could stand as a credible precedent for other interstate quarrels over energy resources in the sea area, such as the deep-water Sardar-e Jangal oil and gas field off Iran's Gilan Province (claimed by Iran, Turkmenistan and Azerbaijan) and Serdar/Kyapaz. Regarding the former, the Norwegian ORG has agreed with KEPCO to study its development. Furthermore, Iran wants to load more crude from Caspian neighbors to its Neka port, in order to profit from re-exporting equal amounts via the Gulf. In August 2017, TANKER-20 went all the way from Turkmenistan to Iran to deliver oil under a crude swap arrangement that had been on hiatus since 2009. Iran also looks to enrich its drilling equipment for offshore exploration in its section of the Caspian Sea, having secured a USD1bn maritime drilling rig, manufactured in Russia's Astrakhan region (Trend 2016). Iran presently has only one rig of this kind in its possession. Finally, Iran has activated geological exploration in its Caspian shelf. On the sidelines of the 2018 Saint Petersburg International Economic Forum, Russia's state geological exploration services company Rosgeologia inked two agreements with Iran's Geological Survey to perform an exploration program in Iran's Caspian section and aero-geophysical surveys on Iranian territory (Rosgeo 2018). These plans only have chances to materialize if Iran, Azerbaijan and Turkmenistan find a consensus on the southern part of the Caspian, just like Russia, Kazakhstan and Azerbaijan have done on the northern. Having been induced by these developments, and while in pertinacious search after a recourse from impending US sanctions[16], Iran might be after all persuaded to give its signature in Aktau.

In the leaked draft Convention, it is moreover stated that prospective underwater pipeline and cable infrastructure pieces could well be built, on condition that they satisfy environmental standards forming part of intergovernmental accords, and without the consent of all five littoral states, as long as the interested countries have made sure to notify their neighbors about their projects' routes. Given that an older study by the EC and the World Bank has assuaged worries over TCGP's ecological and environmental impact on the Caspian seabed (W-Stream 2018), Turkmenistan is in a good position to begin attracting funds and investors for the long-pondered pipeline

[16] The restored nuclear sanctions, targeting oil firms active in or cooperating with Iran, could also affect the SGC, as Iran's NIOC holds a 10% in SD development project.

project. Under the stipulation that Iran and Azerbaijan will have no choice but to construct a pipeline of their own to transport gas from the Alov/Alborz field, which they'll jointly exploit, Tehran will have no further excuse to oppose TCGP. But what about Russia? Having to a great extent assured its energy dominance in Europe by means of Nord Stream 2 and Turkish Stream and, at the same time, working its way into the Chinese gas market with the help of the Power of Siberia pipeline, Russia is currently more preoccupied with the security aspects of the Caspian region rather than with the future of Turkmen gas supplies to Europe via TCGP. According to the draft Convention text, it appears that Moscow and Tehran have obtained a crucial concession in return, i.e. the exclusion of foreign military presence in the Caspian. The possible ratification of this point in Aktau would add fuel to Russia's evolving militarization of the Caspian (see section 4.4) and would possibly endanger the success of trans Caspian energy projects.

All in all, these are the two things one needs to keep an eye on out of this (accidentally?) published draft: a) the shift of the balance of power from the ''Caspian Five'' to bi-trilateral structures, where decision making proves to be less burdensome. This is good news for Azerbaijan, Turkmenistan and Kazakhstan, who will theoretically be able to see TCGP project come true, and whose Caspian interests are limited to hydrocarbon exploration and production activities, organization of the necessary logistics and construction of the respective infrastructure for implementation of expedient and profitable energy routes, b) the provisions on ''the non-presence of third countries' armed forces in the Caspian, a stable conventional arms balance and a reasonable military build-up, taking into account the interests of all sides'' (Caspian Eurasia 2018). This is good news for Iran and Russia, who will gain a vital security foothold in the Caspian amid their deteriorating relations with the West. Although it is not possible to count out a last-minute refusal by any of the riparian signatories, it is not exaggerating to admit that a ''golden'' settlement of the Sea's status might have actually been achieved.

## 5. BEYOND THE SGC FINALIZATION: IMPLICATIONS FOR THE CASPIAN STATES

### 5.1 Current political and economic conditions

Besides their apparent political allure for Russia and Iran, Caspian hydrocarbons bear even higher meaningfulness for the other three states bordering the Sea, which are still in the process of restructuring their post-Soviet economies. Economic interests of Azerbaijan, Kazakhstan and Turkmenistan over Caspian resources confer them an unrestricted freedom to interact with external actors contending for influence over the region. And it is this freedom that empowers them to pursue the best possible deal -in terms of energy and security- and to shift allegiances as soon as conditions change (Kubicek 2013).

The EU strives to secure stable Caspian and Central Asian natural gas supplies via TCGP, in order to put into practice its diversification rhetoric.

Accordingly, within the framework of its common foreign and security policy, it applies a -not always successful- ‘’carrot and stick’’ strategy, offering economic incentives to its resource-rich partners, in exchange for the fulfillment of human rights and democratization-based conditionalities, with the aim of mobilizing a behavioral change in those quasi-authoritarian leaderships and harnessing sustainable long-term relations (Boas 2012). The exertion of the EU’s normative power over Central Asian republics is a sine qua non for upholding a sound energy cooperation, whilst it may fall short of expectations owing to factors such as the EU’s inability to compete on equal footing with China and Russia (competition theory perspective), and the overall declining enthusiasm for Europe in the region (coalition theory perspective), according to Dominique Finon (Voloshin 2014: 54). Both amplification and attenuation of this sort of EU power in the region are closely interlinked with the political and economic conditions reigning in each of the three riparian states.

### 5.2 Azerbaijan

In a 2013 interview of his, the late Azeri Energy Minister, and a leading figure in making a reality of the Contract of the Century, from the post of SOCAR’s president, Natiq Aliyev, stated that energy was a critical field of cooperation between his country and the EU. The two sides had launched their energy dialogue with the signing of an MoU, back in 2006 (Latypov 2014). Even though Azerbaijan, mainly by reason of geography, is the most Western-oriented of Caspian producers, it continues to keep ties (including oil and gas trade ones) with Moscow, that could solidify even more, should Western exhortations for democratization become exaggeratedly expressed.

Nonetheless, shared energy visions with the EU and the US, like TCGP, could motivate the settlement of conflicts that beset the country for decades, from the Serdar/Kyapaz friction to the Nagorno-Karabakh war. Along these lines, the West could contain Russia’s build-up of an excessive geopolitical leverage on the Caspian and the EU could accomplish the outcomes formulated in its primary SGC strategy, by getting to derive gains from the gas reserves of Turkmenistan, and potentially other Central Asian states[17] (Rzayeva & Tsakiris 2012).

An all-time driving force of the Azerbaijani economy has been the mineral resources sector, which, irrespective of foreign capital inflows attracted over the years for the renewal of energy infrastructure and the development of new fields, hasn’t weaned from state inspection. As a matter of fact, all energy companies were excluded from the country’s 1997 mass privatization program. In spite of a 2.7% year-on-year growth in non-oil GDP, supported by benign public financing, stronger external demand, and improved confidence

[17] In addition to its Kazakh extension, TCGP could inch farther onto Central Asia, as the European Commission’s VP for Energy Union Maros Sefcovic stated in an international oil and gas conference in Turkmenistan, in November 2017. Uzbekistan is the first candidate that comes to mind, but its underdeveloped acreage and highly sulfurous gas for the meantime render less advantageous the country’s participation in a trans Caspian export route (Liakopoulou 2018b ibid.).

in response to recovering oil prices (World Bank 2018a), the scarcity of diverse foreign investment sources persists in being a salient problem of the sovereign financial strength. The Azerbaijani government is said to have targeted four non-oil areas as key to economic diversification and future prosperity: agriculture, tourism, information/communication technology and transport, including Azerbaijan's place on the new Silk Road (US Department of State 2018).

While coping with the shock of the 2014-2016 oil price plunge and the wave of national currency devaluations, the May 2017 default by the state-owned International Bank of Azerbaijan (IBA) on its USD3.3bn debt, and the subsequent restructuring, deepened concerns over the fate of big-spending plans aimed at arresting declining oil output (Corcoran 2017). Notwithstanding transitory fluctuations, Azerbaijan has generally boasted exemplary compliance with its 35kbbl/d cut pledge (in order not to surpass the 800kbbl/d threshold), prescribed by the OPEC/non-OPEC cut pact of late 2016, mainly thanks to a slide in output from ACG (585kbbl/d from 2016's 630kbbl/d). But a predictable rebound in indigenous production, encouraged by ACG, SD 2 and international majors' eyeing of new offshore ventures (Absheron, Umid-Babek, Karabakh), and in light of OPEC's new agreement to add 1Mbbl/d to the market through redistribution of quotas, indicates that Azerbaijan is not ready to escape the Dutch disease any time soon.

On the other hand, the oversized reliance of the at the moment basic SGC supplier on hydrocarbon revenues translates not only to economic but to social welfare, as well. So, a decrease in these revenues could possibly provoke social uproars, or even a resurgence of the Nagorno-Karabakh clashes, putting both SCP and BTC pipelines into danger, as they run close to the line of contact that separates the Armenian and the Azerbaijani armed forces.

### 5.2.1 Kazakhstan

Being the largest in size, most sparsely populated and most economically prosperous out of the three infant Caspian republics, Kazakhstan offsets its typically fostered dependence on Moscow, in part ensuing from their geographical proximity, by working upon a solid political and commercial base of relations with the West and by stepping up a flourishing rapport with China. The recent ratification of a landmark Enhanced Partnership and Cooperation Agreement (EPCA) by the European Parliament, the first of its kind with a Central Asian country, covering 29 fields of cooperation and establishing the EU-Kazakhstan Cooperation Council (Kazakhstan Embassy to Belgium 2018), proves the country's alacrity towards engaging into a substantial strategic dialogue with Europe. For its part, Brussels believes that Kazakhstan has rightfully assumed the place of the EU's most important political and trading partner among the other Caspian states, chiefly because of its oil exporter status.

However, it is this status that has been responsible for persistent budget deficits, widening to 1.5% of GDP (from initially planned 1%), following adoption of the 2018 supplemental budget (World Bank 2018b). The impact of the 2008 global financial crisis and the sharp oil price drop is mirrored, just like in Azerbaijan's case, in the Kazakh banking sector that has been plagued by bad loans, as displayed by Kazkommertsbank's USD7.5bn state bailout. In a bid to liberalize the economy and vitalize growth, a 2016-2020 privatization program, worth of USD70bn, is underway. Under this program, ten state-run companies, owned by Samruk-Kazyna national welfare fund, will be publicly listed via IPOs. The country's oil and gas firm and third largest oil producer, KazMunaiGas (KMG), that both Samruk-Kazyna and the National Bank of Kazakhstan had joined forces to bail out in 2015, the year when oil prices plummeted to below USD40/bbl, will represent the apogee of these floats, in a couple of years time.

At the same time, relentless growth of over 300kbbl/d from Kashagan, a giant offshore reservoir in northwestern Kazakhstan[18], operated by the Northern Caspian Operating Company (NCOC), who had invested some over USD55bn up until the project launch in 2016, led to Kazakhstan being singled out by OPEC first as one of the deal laggards, together with Iraq, Malaysia and the UAE (OPEC 2017), and then as the least compliant partner for 2017, when its production was augmented by 180kbbl/d to 1.74Mbbl/d, surpassing even Iraq, previously the biggest overproducer, in the last months of the year. Astana is also in awaitance of a USD36.8bn expansion project at Tengiz, deemed by Chevron to be its second most important investment behind its Permian wells, and a USD1.5bn modernization of the Eni/Shell-operated Karachaganak facilities (plus construction of a fourth compressor and a fifth infield pipeline). Ergo, it is no wonder why the Kazakh Energy Minister Kanat Bozumbayev has called Kazakhstan's 20,000bbl/d OPEC trim commitment ''symbolic'', assuring it would not affect output at the country's biggest oilfields and would only lead to a stabilization of production at the mature ones. And it is no wonder why the government has requested a review of this moderate quota by the cartel, right in the wake of the million-barrel boost compromise attained by Saudi Arabia, Russia and Iran.

In the background of promising production perspectives of a country trying to flex its financial muscle, what would be the actual export potential of Kazakhstan via the SGC? If one is to believe in the emphasis placed by Kazakh officials on the priority of covering domestic demand[19], standing at

[18] The first phase of the field development has a nameplate design capacity of 450kbbl/d which could be lifted to 500kbbl/d through debottlenecking and extra drilling and gas injection capacity, according to the Executive Regional VP of Eni (S&P Global Platts 2018), one of NCOC shareholders along with Total, Exxon, Shell, KMG, CNPC and Inpex.

[19] A four-phase project (main gas pipeline and complementary gas distribution networks) with a capacity expandable to 3BCM and roughly worth USD2.9bn, connected to the Beineu-Bozoi-Shymkent (BBS) pipeline, via which gas is shipped from fields in western Kazakhstan to urbanized areas in the southeast, and overseen by KazTransGas, will be put into effect around 2019, in order to enhance centralized gas supply in the coal-dependent Astana and central and northern regions of Kazakhstan. EBRD may finance approximately one third of the first phase's USD915M cost.

roughly 7.5BCM/a, as far as Kazakhstan's natural gas balance is concerned, it is understood that any export plans will come second. But judging from the post-2020 implementation horizon of projects forming Kazakhstan's offshore business, as well as the even longer timeline of future exploration and production activity (Zambil, Isatay, Zhemchuzhina, Satpayev, sedimentary basins in the Caspian Depression) Kazakhstan might in the longer term possess enough volumes –and hopefully infrastructure- to join TCGP.

### 5.2.2 Turkmenistan

Despite having joined, along with Kazakhstan, the upper middle-income group, Turkmenistan hasn't yet fully transitioned to a market economy (Batsaikhan & Dabrowski 2017). Nicknamed as the ''Kuwait of the Caspian'' because of its proven natural gas reserves of around 17.5TCM[20], its international image is, though, smirched by unofficial payments that govern negotiations with foreign investors, insinuating a noticeable level of endemic corruption. As happens in the two other littoral states under examination, the key industries (including the energy-related ones) are state-run. According to a 2011 EBRD estimate, the private sector share of Turkmenistan's GDP in 2010 was just 25% mostly in retail trade, services and food processing (US Department of State 2014).

Its isolation from the international community and piddling progress in moving from a Soviet-era authoritarian governance style to a democratic system have impelled Turkmenistan to sustain ties with Russia, and, simultaneously, to pursue cooperation with China and Iran. As for relations with the EU, both sides have affirmed their commitment to TCGP implementation through the 2015 Ashgabat Declaration, which, just like the establishment of trilateral meetings at the level of Foreign Ministers of Azerbaijan, Turkmenistan and Turkey, resulted from intermediary activity exercised by Ankara, Turkmenistan's number-one ally and the linchpin of its interaction with the West. Nevertheless, EU officials, hopeful to get Turkmen gas shipped westward, are constantly under internal political pressure to denounce human rights abuses reported in the country (Buchan 2009: 105). This is why the European Parliament's vote on an EU-Turkmenistan Partnership and Cooperation Agreement (PCA) remains pending and bilateral relations are coordinated by an Interim Agreement on trade and trade-related matters, in force since 2010 (EU External Action 2017).

## 5.3 The importance of TCGP

The discussed realization of TCGP, as part of the broader EU-Central Asia energy dialogue, is viewed as a means to satisfy all three riparian states' need to attract Western capital and technical know-how throughout their

[20] Turkmenistan's Galkynysh cluster of gas fields in the southeastern Mary province is the second largest in the world after Iran's South Pars –and the single largest onshore. It could alone raise national gas reserves to 27.4TCM. Currently in its second development phase, it will serve as the origination point for TAPI pipeline and could also supply TCGP via the East-West pipeline (Alp Kocak 2016).

progressive transition to a free-market economic model, which has not yet been fully completed, at least by Kazakhstan and Turkmenistan. It would help restore their malfunctioning economies, bringing them a step closer to Western financial centers. Furthermore, a westward natural gas line would allow Turkmenistan –and possibly Kazakhstan- to diversify their export options away from the Chinese market[21], where, after beginning of gas deliveries from the Power of Siberia pipeline in 2019, they are going to face stiff competition from Russia (Gazprom 2017), a fact that will add up to the risk of financial losses for exporters of other origin. According to Meghan O'Sullivan (2016), ''the nature of the competition has shifted from one in which Russia and China were competing for Central Asian gas to one in which Russia and Central Asia are competing for Chinese markets.''

Finally, Turkmenistan's turn to Europe, in a bid to resolve its energy impasse, takes on special significance in terms of strengthening regional cooperation, at a moment when Gazprom and NIGC have ceased purchasing Turkmen gas –for their own different reasons- and the eastward export diversification process through TAPI is mired by security and financial concerns. As the SGC pipe network heads for finish, Ashgabat has a strong incentive to sit down at the same table with Baku and desist from raising rumpus over Serdar/Kyapaz, thus doing the groundwork for the last missing link in a consequential gas project for the European energy security strategy.

**Conclusions**

EU's aspiration for the diversification of sources, suppliers and routes ending up inside the common energy market would be to a certain extent satisfied through gas shipments from the biggest possible number of Caspian Sea riparian producers, instead of the sole reliance on Azerbaijan's SD 2, in order for SGC's expanded capacity to be fully utilized by 2030, and, simultaneously, in order to avert the possibility of Gazprom seeking to turn TAP into the European link of Turk Stream or ITGI, thus negating the fundamental Fourth Corridor concept.

The signing and ratification of the draft Convention of the Caspian legal status, combined by the settlement of the Azeri-Turkmen bilateral difference over the Serdar/Kyapaz oil and gas field, could bring EU energy security objectives one step closer to fulfillment, as the SGC would make its way to the east of Azerbaijan thanks to TGCP, running from Turkmenbashi to Baku -and possibly also connecting to Kazakhstan.

Implementation of this scenario is impeded by the complex geopolitical situation in the Caspian, characterized by Russia's and Iran's objections to TCGP moving forward. However, ahead of the Aktau summit, it appears that a ''golden'' solution might have been worked out, including a shift from the ''Caspian Five'' to bilateral and trilateral decision-making structures, which

[21] China's gas demand is set to approximately triple through 2040 driven by the combined forces of a growing economy and the need for cleaner fuels in electricity generation to support better air quality and potential climate change action (Mikulska & Maher 2018).

could pave the way for Azerbaijan and Turkmenistan to implement TCGP without the other littoral states' consent, in exchange for security guarantees that would please Russia and Iran, in the form of exclusion of foreign military presence from the Caspian. Still, a heavy militarization of the Caspian could prove not to the interest of energy companies wishing to do business in the region.

For the EU, the Caspian-driven diversification is a viable option against its overdependence on the Ukrainian transit corridor, through which the Bloc has experienced supply crises in the past, prompting a set of institutional responses, and which Gazprom is likely to quit post 2020, upon commissioning of Turk Stream and Nord Stream 2. The promising alternative of US LNG could also reinforce market competition in the still inhomogeneous EU gas market, that will need time and political motivation to fully liberalize and develop commercial, hub-priced entry-exit zones. Nevertheless, given the affordability of Russia's and Norway's piped gas, especially for the targeted CEE clientele, attractiveness of US gas will only increase throughout chilly blasts, that cause European prices to up, providing the EU extends its regasification capacity via new infrastructure.

As the EU pushes towards more open and competitive markets, hub-indexed price formation and spot trading, Caspian gas through the SGC, which, along with US deliveries via planned FSRUs in Greece and Croatia, will jointly feed the Greece-Ukraine Vertical Gas Corridor, has encouraged an array of SE countries to describe themselves as regional gas trading hubs. On the other hand, in natural gas literature many hubs are called, but few are actually traded. The emergence of a hub in SE Europe would, of course, boost transparency, efficiency and flexibility, but it is not yet clear which country and/or countries it would involve. One version would be a geographical space between Turkey and Greece, since by 2020 Turkey will have expanded its regasification capacity by adding one more FSRU, raising the total number of its LNG import terminals to five (both inland and FSRUs), and pipeline infrastructure (TANAP, Turkish Stream). Meanwhile, Greece anticipates more storage and regasification capacity until 2020 (through TAP and Northern Greece's FSRU that will be added to the Revithoussa terminal), as well as new interconnections, such as the chosen export option for the Eastern Mediterranean supplies (East Med pipeline, Israel-Turkey pipeline, Egypt LNG exports), Turkish Stream and/or IGI Poseidon. At the same time, Bulgaria harbors its own ambitions to transform from a transit country into a trading center and could be greatly helped in this by the recent thaw in relations with Russia, who might reroute Turk Stream's second string towards the Varna-based Balkan Gas Hub.

Whatever the outcome of this battle of infrastructure and geographical location assets, it is evident that a finalized SGC (including TCGP) would enable Caspian gas to equally compete for EU market share, without sidelining competitors, be it Russia, US, Iran, Iraq Qatar, Algeria and the Eastern Mediterranean hopefuls. It would also allow the participating Caspian

littoral states to diversify their gas export routes and reduce their one-sided export dependence on China and Russia.

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