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**Russia and the Central Asian
Regional Energy and Security Complex**

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of

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1. Research History and Explanation of the Topic

By the beginning of the 21st century, due to the dynamic increase in their demand, fossil fuels became a subject of political, economic and military competition, both globally and regionally. Consequently, the strategic importance of the countries and regions with significant oil and gas reserves soared, turning them into the scene of rivalry between the powers seeking control over these resources. This is the case of the three Central Asian states of Kazakhstan, Uzbekistan and Turkmenistan, all of whom are rich in fossil fuel reserves. A 21st century "Great Game"¹ is unfolding, in which Russia, China, the United States of America (US) and the European Union compete for leverage over the resources of the region. This Dissertation examines how Russia's security and energy policy developed in Central Asia over the period between the breakup of the Soviet Union (USSR) and the end of the second premiership of Vladimir Putin, i.e., between December 26 1991 and May 7 2012. Since the historical roots of these two research topics and the chain of events and processes (and, in many cases, their relevant consequences) begin but go beyond the researched period, when and inasmuch necessary, they have been included in the Dissertation. It is important to note that only the natural gas segment is analyzed in the context of bilateral energy relations. The oil sector, - although a significant factor in the energy relations of Central Asia and Russia - is not the subject of this Dissertation.

Rather than rely on the most commonly applied realist and neorealist theoretical approaches regarding the analysis of Russia and Central Asia, this Dissertation is based on Barry Buzan and Ole Waever's Regional Security Complex Theory (RSCT). This provides the basis for the added value of the Dissertation for two reasons. On the one hand, Buzan and Waever last analysed Central Asia on the basis of the RSCT in their book „Regions and Powers: The Structure of International Security”, published in 2003 – i.e. fifteen years ago –, so the re-evaluation of their findings and the examination of the events that have since taken place are both timely.

At the same time, since the RSCT differs in its approach from the mainstream theories, it has hardly ever been applied – to examine the political, economic and physical aspects of gas trading between Russia and Central Asia. Therefore, using a combination of sectoral and

¹ The "Great Game" refers to the 19th century struggle between Russia and Great Britain for the leadership in Central Asia.

geographical analysis opened up an opportunity for applying a novel approach to a topic that has gained more and more strategic significance in the 21st century.

Hungarian and foreign language literature almost without exception follows the same *in medias res* approach when discussing the relationship between Russia and Central Asia in the field of natural gas. Mostly, on the first pages they present the various estimates of the country's natural gas reserves, the main routes of access to the external energy markets and the resulting bilateral and multilateral political, economic and strategic advantages and disadvantages. Meanwhile, they rarely set up and apply a policy theoretical background for the analysis of energy relations. When they do, however, it is almost exclusively based on the realist or neorealist approach. When writing this Dissertation, the Author opted not to follow this trend, because of the belief that such a one-sided analysis is neither sufficient nor appropriate. Therefore, in order to avoid the *in medias res* approach, the Central Asian-Russian relationship is introduced through the multidimensional coordinate system of Russian foreign policy, and only then is the correlation between natural gas and security examined in depth.

2. Applied Methods and Hypotheses

This Dissertation is primarily based on and reflects the findings of secondary researches. Due to the multidisciplinary nature of the subject, the preparation of the Thesis, in addition to international relations theory, required geographical, geological, technical-gas engineering and economic knowledge. Accordingly, the literature used is wide in scope.

The first group of resources consists primarily of English and, in smaller part, German, Hungarian and Russian language monographs, professional and sector-specific books, journals and analyses published by various research institutes; of the latter, materials of the Oxford Institute for Energy Studies were particularly useful.

The second category of resources comprises online journals, studies, daily and weekly news articles that were of particular importance regarding the background and follow-up of recent events. Although some of these sources are secondary or tertiary material by authors who are not necessarily specialists of the given subject - and therefore the texts are not free from mistakes, simplifications and generalizations - they still proved indispensable. In addition to the fact that many of them contain relevant partial information, they often led to relevant primary sources, the use of which was pursued throughout the Dissertation. The Author also managed to obtain useful information from conference materials written by researchers

studying the post-Soviet energy sector, as well as through attending conferences, summer universities and study visits dealing with the research topic in Kazakhstan, Azerbaijan, Great Britain, Ukraine etc.

Thirdly, in order to obtain first-hand information, the Author of this Dissertation contacted all of the national energy companies, the ministries responsible for energy issues and regulatory authorities that supervised the national natural gas companies in the countries that constitute the subject of this Thesis. Regrettably, with the sole exception of the Kazakh national energy company, they either did not respond at all, or rejected the request.

The fourth category of resources are the reports, announcements, press releases, project descriptions and statistical data available on the official websites of domestic, Russian and other foreign energy companies operating in the Central Asian countries examined. These sources contain primary information regarding the technical and technological background of certain Central Asian gas projects, as well as their upstream, mid and downstream activities. The governmental and energy ministry websites of the Central Asian states studied provided valuable - albeit often reticent and fragmented - information on the background, current status and the official political position on certain natural gas projects. More limited, and in some cases (Turkmenistan) almost no statistics are available from national sources on natural gas reserves, output and export figures of Central Asian countries. For this reason, the Author had to rely on data obtained from international sources, primarily the British Petroleum (BP) Statistical Review of World Energy, the Oil and Gas Journal, the German Federal Institute of Earth Sciences and Natural Resources, the OPEC Annual Statistical Bulletin, the U.S. Department of Energy, the International Energy Agency and the U.S. Central Intelligence Agency. It needs to be highlighted that the Author relied on BP's data to examine and compare reserves, production and exports of natural gas in the case of each Central Asian state studied, for reasons of coherence and availability of long-term data. The data obtainable from the above-mentioned other sources is quoted mainly for the sake of comparison and information, since in fact they often use data from BP or each other, and are therefore fully or partially the same. The fact that, in the Author's experience, most analyses of fossil energy resources rely on the Statistical Review of World Energy as a reference point also justifies its use as the main point of reference.

In the Dissertation, the quantity of natural gas is provided in billion (bcm) and trillion (tcm) cubic meters. This requires the short description of two technical clauses. Firstly, BP and the states of Central Asia measure the amount of natural gas differently. For BP, the normal cubic meter is the volume of gas at +15 °C and 1 atmospheric pressure, while in Kazakhstan,

Uzbekistan and Turkmenistan – in accordance with the old Soviet practice – it is calculated at +20 °C and 1 atmospheric pressure. Consequently, the Central Asian data are on average at least 7 percent higher than the BP figures. In many cases, however, there are some much more significant differences between the official domestic and BP's data, which the differing calculation methods do not explain.

Secondly, the classification system regarding the size of natural gas reserves used by the Central Asian states also differs from the widely accepted international methodology (used by BP) identifying 'proved' (A), 'probable' (B) and 'possible' (C) categories. In contrast, Kazakhstan, Uzbekistan and Turkmenistan – again, according to Soviet-Russian practices – rank natural gas reserves in three main (A, B, C) and several subgroups (C2 and C3) (D1 and D2), which makes it possible to include in their reserves presumed natural gas quantities not covered by evaluated and analyzed data. Categories A and B approximate 'proved' in the international classification, C1 corresponds to 'probable', while C2, D1 and D2 are the 'possible' categories.

As already mentioned, this Dissertation examines the period between the disintegration of the USSR and 7 May, 2012. However, because the effects of the infrastructure projects and policy decisions discussed go beyond this timeframe, and thus have a profound effect on the regional energy security complex, the pool of resources used, as well as some parts of the Dissertation exceed this period. E.g. the installation and commissioning of three branches of the Central Asia Central Gas Pipeline, or a major reduction (and then complete cancellation in 2016) in Russia's imports of Turkmen gas are such examples.

The Dissertation comprises the following five hypotheses:

H1: Following the dissolution of the Soviet Union, the presence of Russian military forces in Central-Asia meant that the region's security dynamics did not end up being linked to Afghanistan's, thus essentially constituting the southern border of the Central Asian Regional Security Complex.

H2: After the collapse of the USSR, international regional military security organizations in which Russia and the states of Central Asia were all members, did not contribute significantly to the strengthening of Russia's military influence in Central Asia; hence, bilateral Russia-Central Asia cooperation has remained dominant in shaping regional security dynamics to this day.

H3: The American military presence in Central Asia following the terrorist attacks of 11 September, 2001 has led to the intensification of Russia's regional strategic position in the medium and long-term.

H4: After the Soviet Union fell apart, Central Asia initially became a natural gas sub-complex around Russia; then, from the late 2000s, the region evolved into an autonomous complex where Russia and China overlap.

H5: Despite substantial natural gas reserves and output, Central Asia will not play a decisive role in satisfying the global demand for natural gas in the short and medium term.

3. Structure of the Dissertation

This Dissertation seeks to apply a different approach to mainstream analyses not only in terms of the theoretical concept it applies, but also in its logic and structure. In doing so, it can be divided into two large parts. The first part is the multidimensional - political, military, economic - examination of the relationship between Russia and Central Asia from the disintegration of the USSR to 2012. The second part examines the relationship between the natural gas industries of Kazakhstan, Uzbekistan, Turkmenistan and Russia. The Author had three main reasons to structure this Dissertation this way. First, to avoid the widespread *in medias res* approach. Second, it allows for the analysis of events and changes that have taken place in the Central Asian region since the last comprehensive study of Buzan and Waever, based on their concept of the RSCT. Third, it allows for the singling out and close examination of the bilateral and multilateral energy and security policy processes, while at the same time it remains possible to keep track of the possible correlation between – or, on the between general political and energy relations or, on the contrary, their different dynamics.

The first chapter introduces the topic and the purpose of the Thesis, describes the methods applied and the data sources used, and outlines the hypotheses. The second chapter describes the the regional security complex theory developed by Barry Buzan and Ole Waever, which provides the theoretical background of the Dissertation. Subchapter 2.1 examines how states that serve as referent objects of the "classical" security complex theory relate to each other in terms of threats and vulnerabilities. This section looks at the role of factors such as geographical distance, polarity of interstate relations and changes in power distribution. As Buzan and Waever further developed it, the RSCT ended up being a state-centered approach – subchapter 2.2 examines the consequences of overcoming this approach by taking into account other

factors, such as the homogeneity or heterogeneity of a complex, the process of securitization of a sector or issue, and the impact of these factors on the given RSC's security dynamics.

The third chapter examines the changes that took place in the political, economic and military relations of the post-Soviet states with Russia from the breakup of the Soviet Union till 2012, following the approach of Buzan and Waever in dividing the post-Soviet regional security complex (RSC) into four subregions. In the case of the countries which do not constitute the subject of the Dissertation - the Baltic, the „Western” and Caucasian states - only the main aspects of the relationship are mentioned.

Bilateral and multilateral relations between Kazakhstan, Uzbekistan, Turkmenistan, Kyrgyzstan, Tajikistan and Russia are presented and analyzed in detail in separate subchapters.

Chapter four analyzes the changes that have taken place since the disintegration of the USSR in terms of the borders, polarity and security dynamics of the Central Asian RSC. Since the terrorist attacks of 11 September 2001 opened up a new chapter in the relationship between the states of Central Asia and Russia, the preceding and subsequent periods are examined separately. This chapter is of particular importance, since it essentially a reassessment of the position and role of Central Asia in the post-Soviet RSC, based on the review of Buzan and Waever's findings and the analysis of changes in the region's structure.

The fifth chapter looks at the applicability of the RSCT in describing and analyzing interstate energy relations. First, the most important concepts and factors of energy security are examined from the energy exporting and importing countries' point of view. Building on these, the concept of regional energy security is then drawn up. Thereafter, following the thread of the fourth chapter outlining the RSTC's foundations, its applicability for the energy RSCT concept is tested. In addition, the process of securitizing energy issues is analyzed.

The sixth chapter reviews the main developments of the most important gas extraction regions and the establishment of the gas pipeline network and the natural gas industry of the Soviet Union since the beginning of the 1940s. Following the exposition of the conditions resulting in the growth of Ukrainian natural gas production which laid down the foundations of the Soviet natural gas industry, the chapter explores the developments of the natural gas industry of the South-Caucasus, Central Asia and Siberia which took place after the discovery of the region's giant deposits. The characteristics of the main gas export routes of Central Asia during the Soviet period, and then the export routes created following the 1991 independence of the states is described. Subchapter 6.2 analyzes the changes in natural gas reserves and the output of Central Asian states between 1960 and 1990 by a comparison of the countries both

with each other and with the total Soviet production and reserve data. Subchapter 6.3 examines the background and the development of the Soviet natural gas industry – with the primary focus on the production of pipelines and compressor stations – and the evolution of its relationship with the West. Subchapter 6.4 sums up the development of the institutional background and the structure of the industry.

The seventh chapter examines the largest organizational, structural and technological challenges faced by the states of Central Asia in their natural gas sectors following the disintegration of the USSR. Close attention is paid to the nationalization of the natural gas sector, the process of setting up national gas industry companies and the challenges the region had to meet when selling natural gas on domestic and foreign markets. This analysis is followed by a review of the process of linking the Central Asian states with foreign partners.

The eighth chapter details the changes and the output of the natural gas reserves of Kazakhstan, Uzbekistan and Turkmenistan, and the main factors that may influence them in the future. This, then, is followed by an analysis of data on the natural gas output of each republic during the Soviet period, as well as the characteristics of the largest natural gas fields and gas extraction regions and their role in the natural gas industry of each country.

The ninth chapter looks at the specifics of the internal gas market of each Central Asian state as well as the characteristics of the natural gas trade within the region by examining the historical dynamics of natural gas consumption and the future medium- and long-term objectives for natural gas consumption of the Central Asian states studied. The chapter reviews factors which are likely to influence future internal gas demand, such as the expected increase in population growth, the forecasted volume of natural gas production and the obligations arising from long term contracts.

The tenth chapter analyzes the changes that have taken place in the Kazakh, Uzbek and Turkmen structure and dynamics of natural gas export policy since the breakup of the Soviet Union. After examining the characteristics of the internal transmission and distribution network, the main cornerstones of the gas industry relationship between the Central Asian states and each of their main outlet markets are presented.

Based on the RSCT, the eleventh chapter first examines the changes that occurred in the boundaries, polarity and security dynamics of the Central Asian energy security complex in the time period between the collapse of the USSR and December, 2009, and then describes and analyzes the subsequent developments.

The final chapter summarizes the main events and changes in the internal and external security and natural gas trade system of the states of Central Asia from the disintegration of the Soviet Union to the present day, and verifies the validity of the Dissertation's hypotheses.

4. Findings of the Dissertation

Since the dissolution of the USSR in 1991, the political-security relations between the newly independent states of Central Asia (Kazakhstan, Uzbekistan, Turkmenistan, Tajikistan and Kyrgyzstan) and Russia have not always been stable and developed in a positive direction. This was partly due to differences in the quality and intensity of the political, economic and military resources and capabilities between the states of the region, and their consequent level of reliance on Moscow, the former federal center. While – owing to their strategic location, resources, economic structure and the resulting ability to maneuver politically – Kazakhstan, Uzbekistan, and Turkmenistan were able to pursue a relatively autonomous, multi-vector foreign and security policy, Kyrgyzstan and Tajikistan remained heavily reliant on Russia in terms of their political and economic stability and military security. Still, despite its own internal difficulties, Russia remained the most important political, economic and military partner of all five Central Asian states up until the beginning of the 2000s. A partial - and temporary - shift followed, however, after the 11 September 2001 terrorist attacks, linked to the U.S. military campaign in Afghanistan. The states of Central Asia suddenly emerged as important partners in the eyes of Washington because of their strategic location, which posed a never-before-seen challenge for Russia and the pursuit of Russian interests in the region.

H1: Following the dissolution of the Soviet Union, the presence of Russian military forces in Central-Asia meant that the region's security dynamics did not end up being linked to Afghanistan's, thus essentially constituting the southern border of the Central Asian Regional Security Complex.

Verification: The disintegration of the Soviet Union did not automatically result in the disappearance of Russian military presence in Central Asia; up until the end of the 1990s, Russian troops were present in all former republics, except Uzbekistan. This was the result of the following circumstances: on the one hand, due to lack of resources and experience, the states of the region relied on Moscow in establishing their own armed forces, including their organizational structure as well as the necessary and appropriate technology. On the other hand,

the presence of Russian troops on Central Asian soil balanced the limited self-defense capabilities of the newly established national forces, and thus Russia safeguarded the security of the region in the face of external threats. The presence of the Russian military in Turkmenistan and Tajikistan proved to be of particular significance, since both countries are neighbors of Afghanistan, where the consolidation of the Taliban influence created by the mid-1990s a political, ideological and military power center that, due to its unpredictability, posed a major security challenge to Central Asia. There was a strong probability – especially in case of the Tajik civil war – that a link, capable of destabilizing the whole region, might form between the security dynamics of the Central Asian states and Afghanistan. The presence of Russian troops – primarily engaged in border policing and defense activities – in Turkmenistan and Tajikistan played a key role in avoiding such an outcome. The Tajik-Afghan border, the most crucial point for the region's security, was fortified by the deployment of the Russian 201st mechanized rifle division who formed a second line of defense behind the Tajik border guard forces. Russian military presence thus meant that Afghanistan's fragile security situation could not spill over into Central Asia. The end of the Tajik civil war in 1997 eliminated the likelihood of a link forming between the security dynamics of Afghanistan and the region and thereby solidified the southern border of the Central Asian RSC.

H2: After the collapse of the USSR, international regional military security organizations in which Russia and the states of Central Asia were all members, did not contribute significantly to the strengthening of Russia's military influence in Central Asia; hence, bilateral Russia-Central Asia cooperation has remained dominant in shaping regional security dynamics to this day.

Verification: Following the breakup of the Soviet Union, Russia called for the establishment of several regional international organizations aimed at strengthening the political, economic and military integration between the former republics. However, even the most important ones – the Commonwealth of Independent States (CIS) and the Collective Security Treaty Organization (CSTO) –, have produced only moderate results in fostering military cooperation between the Central Asian states and Russia. The CIS, the members states of which include all Central Asian states except for Turkmenistan, has few supranational powers (primarily in trade, finance and legal harmonization) but can only practice policy coordination in the field of security cooperation.

A greater degree of security cooperation has developed, however, within the framework of the CSTO. The Statute of the CSTO stipulates that an attack against one of the member states would be perceived as an act of aggression against all, and therefore allow for collective self-defense and response. The CSTO can also be regarded as a political-rhetorical improvement on the CIS because its member states try to coordinate their capabilities in the field through joint military exercises. The organization's significance for Russia is undermined, however, by the fact that neither Turkmenistan, nor Uzbekistan are among the member states. The latter owns the most powerful armed forces in Central Asia and has withdrawn from the organization twice since joining in 1994.

Consequently, bilateral relations will continue to be in the focus of Russia's security and defense cooperation with the states of the region. In fact, ever since the dissolution of the USSR, Russia has tried to secure the regional presence of its armed forces on a bilateral basis instead of in the framework of the CIS or the CSTO. Examples include the stationing of Russian border guards in Turkmenistan until 1998 and in Tajikistan until the end of 2005. In Kyrgyzstan, the Russian Air Force may use the Kantian Air Force Base until 2027, while in Kazakhstan the Bakonur Cosmodrome, the Balkhas radar station and the Sary-Shagani anti-ballistic missile test ranges will host Russian troops until 2050. According to a 2012 agreement between Dushanbe and Moscow, the 201st mechanized rifle division may remain in Tajikistan until 2042.

Another argument in favour of Moscow's preference for building security and defense relations on a bilateral basis, and not within the CIS or the CSTO, is that this is the method that has worked with the rather reluctant Uzbekistan and Turkmenistan. The first bilateral military exercise between Moscow and Tashkent, after the breakup of the Soviet Union, took place in 2005, in the framework of which Russian troops entered Uzbekistan for the first time in two and a half decades. The latest five-day joint exercise was held in Uzbekistan in October 2017. There have also been signs recently of an intensifying cooperation between Russian and Turkmen forces. Due to the deteriorating security situation in Afghanistan, Turkmenistan has lately shown openness to deepen its cooperation with Russia: in June 2016, the Russian Defense Ministry announced that it had reached an agreement with its Turkmen counterpart regarding the training of the Turkmen army and modernizing its equipment.

H3: The American military presence in Central Asia following the terrorist attacks of 11 September, 2001 has led to the intensification of Russia's regional strategic position in the medium and long-term.

Verification: The September 11, 2001 terrorist attacks and the subsequent invasion of Afghanistan by the US changed the security dynamics of the Central Asian region fundamentally. The U.S. military presence in Afghanistan and, most importantly, in the states of Central Asia, created a new strategic environment in Moscow's "backyard". The offers made by the states of the region in support of the American military campaign in Afghanistan - the use of military facilities in Uzbekistan, Kyrgyzstan and Tajikistan; the use of the airspace in all of them – had a significant effect on Russia's regional military influence. However, it did not last. In addition to recognizing that removing the Taliban from power serves its own interests, too – since it eliminates a major factor of security uncertainty –, Moscow has actually managed to extend its military presence in the region. In Kazakhstan, Kyrgyzstan and Tajikistan, it was able to secure the presence of Russian troops for decades. Meanwhile, American presence in Central Asia has been weakening. U.S. troops left Uzbekistan in 2005, Kyrgyzstan in 2014, while the size of the troops stationed in Afghanistan has been gradually reduced since the end of 2014, in line with Washington's decision to withdraw.

In the meantime, Moscow has taken several steps to deepen its security and military cooperation with the states of the region. With the exception of Turkmenistan, Russia has held several joint military exercises with each of the states in the region over the past fifteen years, which has largely contributed to its ability to maintain Russia's capability to project strength; the US did not pursue such activities. The presence of Russian troops in Central Asia is currently secured for the long run, and thanks to the intensification of security and military cooperation its strategic positions in general are now stronger than ever since the breakup of the USSR.

H4: After the Soviet Union fell apart, Central Asia initially became a natural gas sub-complex around Russia; then, from the late 2000s, the region evolved into an autonomous complex where Russia and China overlap.

Verification: This Dissertation argues that if the following three conditions were met, Central Asia could be considered an autonomous natural gas complex.

- The emergence of new, high-capacity gas export route(s) that do not cross Russian territory.
- None of them can end up in monopoly position either as transit country or outlet market of the region's natural gas export.
- The countries of the region ought to limit the securitization of exported natural gas running through their territory as much as possible.

None of the above three factors were present in case of the countries of Central Asia when they became independent. The export of natural gas from Kazakhstan, Uzbekistan and Turkmenistan continued to go almost exclusively through the Central Asia Center and the Buhara-Ural pipelines to Russia, or through Russia to other post-Soviet markets. No significant shift occurred in terms of reliance on the northern export routes until the end of the 2000s, although the Korpeje-Kordkuy pipeline connecting Turkmenistan with Iran was inaugurated in 1997, and facilitated the delivery of Central Asian gas to the south, bypassing Russia. The importance of the pipeline from an export diversification perspective, however, is marginal for two reasons: on the one hand, its small capacity was only partially exploited; on the other hand, the pipeline only provided an export diversification opportunity for Turkmenistan, as in the absence of connection, the rest of the region was unable to supply natural gas into the pipeline. Therefore, the pipeline could not substantially impact the region's gas export structure, which in turn meant that the states of Central Asia continued to be reliant on Russia as a market and transmitter, which presented a significant export security risk for Astana, Taskent and Ashgabat. Thus, after becoming independent, the states of Central Asia – owing primarily to the specificities and orientation of their natural gas infrastructure inherited from the USSR – were sidelined as a sub-complex of the centralised natural gas complex organised around Russia, in which Moscow enjoyed asymmetric advantages. This changed, however, in the late 2000s due to the combined effect of two factors: the Central Asia-China gas pipeline was put into operation, while Russia first scaled down and, in late 2016, cancelled all gas imports from Turkmenistan altogether.

The installation of the Central Asia-China pipeline, connecting Turkmenistan and China, in December 2009 – which was preceded by China's getting involved in Turkmenistan's natural gas extraction – has altered the natural gas export opportunities and dynamics of the Central Asian states fundamentally in several ways. First of all, its utilisation fulfilled the requirement that a high capacity pipeline that does not run through Russian territory be set up, enabling export diversification; an indispensable condition if the region were to become an autonomous complex. The full potential of the Central Asia-China pipeline, however, has not been realized. The volume and orientation of natural gas exports from Central Asia following the commissioning of the pipeline shows that even though it crosses the territory of all gas exporting states of the region and has thereby created a realistic alternative to Russian exports, only Turkmenistan has used it to its benefit. For Kazakhstan and Uzbekistan, Russia remains the largest and most important outlet market, and only smaller quantities of natural gas are

pumped into the Central Asia-China pipeline. This, of course, does not mean that the two countries could not restructure their natural gas export patterns in the future by creating more space for exports to China, but, at present, there are no such signs.

More importantly, however, the opening of the Central Asia-China pipeline put an end first to Russia's quasi-monopoly in the region, and then to its primary position as the primary buyer of Central Asian natural gas. A similar step, albeit of smaller significance, was the 2010 installation of the second gas pipeline linking Turkmenistan to Iran, the capacity of which – just like in case of the first pipeline –, is only partially exploited.

This all coincided with the emergence of processes that have had a diminishing effect on the extent to which natural gas exports in the Central Asia region were securitized. Relations between Tashkent and Astana declined during the 2000s, as Uzbekistan sporadically either reduced or even suspended its gas supplies to Kazakhstan, jeopardizing the latter's energy security as a result. In order to reduce its dependence on gas imports from Uzbekistan, Astana initiated three projects in the last third of the decade. The planned launch (in the first half of 2018) of the natural gas pipeline connecting the gas fields in the western part of Kazakhstan to the southern parts of the country is the most significant of the three, as by meeting the South's gas demand, it is expected to terminate the securitization of Uzbek gas imports from the Kazakh side.

By the beginning of 2010s, the construction and installation of the Central Asia-China pipeline, China's engagement in Turkmenistan's natural gas extraction industry, and the redirection of Turkmen – and to a smaller extent Kazakh and Uzbek – natural gas export to the Chinese market resulted in the formation of a single Central Asian energy security complex, where both Russian and Chinese interests overlap.

H5: Despite substantial natural gas reserves and output, Central Asia will not play a decisive role in satisfying the global demand for natural gas in the short and medium term.

Verification: Although Kazakhstan, Uzbekistan and – most importantly – Turkmenistan all reside over significant natural gas reserves, there are several internal factors which may encumber the increase of their natural gas export figures in the short and medium run.

The preference of the Kazakh political leadership for oil extraction requires that an increasing amount of natural gas be re-injected into the fields, which, in turn, reduces the volume of exportable natural gas. Even if Astana supported the increasing of natural gas

extraction, however, its decision to extend domestic gas supply to the southern, densely populated industrial regions, and to connect an increasing number of counties to the national gas grid would result in the reduction of the amount of exportable gas.

Although Uzbekistan resides over the smallest natural gas reserves in Central Asia, the real challenge faced by Taskent is the high domestic gas consumption which is expected to continue to rise in the future. The country's largest natural gas fields have already reached – in fact, exceeded – their extraction limits. The volume of Uzbek gas extracted is therefore decreasing, and no new deposits have been discovered to counterbalance this tendency. The center of gravity of production has consequently shifted towards small and medium-sized fields. These are, however, used to meet the demand of the residential and industrial sectors, rather than to supply export markets. These factors forecast an uncertain future for Uzbekistan as a natural gas exporter.

Having the largest natural gas reserves in Central Asia, Turkmenistan is destined to be a globally significant, major gas exporter. However, challenges faced by Ashgabat hinder the realization of this great potential. The increase of natural gas production has been slowing down recently. In the meantime, there has been a steady increase of gas consumption which now takes up almost half the amount of all extracted gas. The country has failed to meet the target set for increase in yields. In fact, at present, even partial achievement seems doubtful. Even if Ashgabat was able to increase production and curb the domestic demand growth, the country's ineffective export policy would remain a barrier to a significant increase in exports. If Turkmenistan continues to insist on transporting the extracted natural gas only to its border – from where the buyer is responsible to transport it to its final destination – it is highly unlikely that Turkmen gas will reach the western markets. However, even if Ashgabat decided to change this aspect of its policy, future production prospects remain uncertain: it is questionable if there would be enough free capacity to fill all export pipelines (those under construction or only planned included).

Besides the above-mentioned internal challenges, there are also a number of external factors that affect and thereby prevent all three Central Asian states from playing a greater role in satisfying the global demand for natural gas. Perhaps the most important of these factors is that the region is surrounded by countries – such as Russia, Azerbaijan or Iran – which are large or potentially large natural gas exporters themselves, and therefore have no interest in letting Central Asian gas reach the most lucrative European markets. Another difficulty they face is that, as landlocked countries, none of them has direct access to the world's oceans or seas, so

they are unable to engage in the export of liquefied natural gas, a sector that is becoming more and more important in global natural gas trade. Therefore, this Thesis argues that the states of Central Asia will not be able to play a decisive role in meeting the growing global demand for natural gas, and that their role will be limited to supplying regional outlet markets and China.

As the theoretical background of this Dissertation, the Regional Security Complex Theory required the Author to use of a novel approach and do some challenging analytical work on the security and gas industry relations in Central Asia. It is argued that several military-security changes have taken place and had significant impact in Central Asia since the last RSTC-based analysis of the region by Buzan and Waever in 2003. Nevertheless, the Author considers it necessary to point out the limits of the applicability of the RSCT to the description and analysis of natural gas relations which came to light during the course of writing the Dissertation. While using the RSCT has proved to be a novel and valuable approach in investigating the security and energy relations between the states of Central Asia and Russia, this can be attributed to the relative isolation of Central Asia from other regions. If the states of the region had access to the world's seas and the ocean, and could thus become involved in the global trade of liquefied natural gas, the theory's region-specific analysis and explanatory power would suffer significantly.

Overall, it can be argued that the "Great Game" in Central Asia is not over at all – it is still played, albeit by different actors, with new dynamics and on expanded territory. Great Britain has been replaced by the US – and will likely be replaced to an even greater extent by China – while Russia remains a constant factor. The "Great Game 2.0" is still going on, and no winner is likely to be declared for decades, if at all. However, the interest the global powers pay to the region clearly demonstrates that since becoming independent, Central Asia's political, economic, and military-strategic value has increased significantly. The most burning question regarding the region's future is whether, in parallel with strengthening its regional economic presence, China intends to establish a military foothold in the region. Should this be the case, "Great Game 3.0" between Russia and China will be inevitable.

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